



**SZABIST**

Shaheed Zulfikar Ali Bhutto  
Institute of Science & Technology  
[www.szabist.edu.pk](http://www.szabist.edu.pk)

Discover  
Yourself

# PROSPECTUS 2015

Karachi Campus

[www.szabist.edu.pk](http://www.szabist.edu.pk)

We just Don't Work Hard  
**We Work Smart**



# SHAHEED ZULFIKAR ALI BHUTTO INSTITUTE OF SCIENCE & TECHNOLOGY

## THE VISION

The Shaheed Zulfikar Ali Bhutto Institute of Science and Technology shall be a world class institute recognized globally for its excellence in education, scholarship in research and distinction in service.

## THE MISSION

The Shaheed Zulfikar Ali Bhutto Institute of Science and Technology has been established with the objectives of producing highly qualified scientific and technical personnel to meet the country's requirements; conducting state-of-the-art scientific and technological research and development in support of the private and public sectors; providing hi-tech scientific and technological assistance to the Pakistani industry to enable it to compete with the world industries in global trading; providing highly trained scientific and technological personnel to be able to attract the growth of hi-tech industries and foreign and Pakistani investment; and providing a sound socio-economic and scientific base and infrastructure to Pakistan to be able to meet the economic and technological challenges of the 21<sup>st</sup> century.

# CONTENTS

01

## INTRODUCTION

Programs & Curricula  
Admission Requirements  
Admission Test Alternates  
Transfer Policy  
Financial Assistance

11

## LIFE AT SZABIST

Video Conferencing  
Forums/Seminars/Guest Lectures  
Business Productivity Courses  
Classrooms/Labs/Libraries  
Executive Development Center  
Jobs and Internships  
SZABIST Student Council & Student Societies  
Newsletters  
International Linkages and Collaborations

16

## FACULTY OF MANAGEMENT SCIENCES

BBA  
BABS  
EMBA  
MBA  
MBA (Banking & Finance)  
MPM  
MSPM  
MSMS  
PhD

29

## FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS Computer Science  
MS Computer Science  
PhD Computing

36

## DEPARTMENT OF ENGINEERING

BE Mechatronic Engineering

# CONTENTS

39

## **FACULTY OF SOCIAL SCIENCES**

BS Social Sciences  
MS Social Sciences  
PhD Social Sciences

44

## **DEPARTMENT OF MEDIA SCIENCES**

Bachelor of Media Science  
Master of Advertising  
MS Media Studies

48

## **FACULTY OF EDUCATION**

MS Educational Leadership and Management  
PhD Educational Leadership and Management

51

## **FACULTY OF BIOSCIENCES**

BS Biosciences  
MS Biosciences  
Master in Public Health (MPH)

55

## **INTERNATIONAL PROGRAMS**

LLB Programme – University of London  
BA (Hons.) Business Studies – University of South Wales, UK

59

## **ACADEMIC CALENDAR 2015-16**

Fall 2015  
Spring 2016

# SHAHEED ZULFIKAR ALI BHUTTO



**January 5, 1928 - April 4, 1979**  
**Former Prime Minister of Pakistan**

"We will give science and technology requirements the highest priority and our attention. To implement any program of scientific and technological development, the country needs to train scientific manpower. In this, the schools, colleges and universities have to play their role. I desire that vast number of people of Pakistan should acquire technological skills. I want first-class science in Pakistan because nothing less is acceptable. And I wish Pakistan to be increasingly self-reliant in all aspects of technology."

*Address at the Inauguration Ceremony of Karachi Nuclear Power Plant, Karachi, Pakistan, November 28, 1972.*

# SHAHEED MOHTARMA BENAZIR BHUTTO



**June 21, 1953 - December 27, 2007**  
**Former Prime Minister of Pakistan,**  
**Founding Chancellor SZABIST**

"Technology and Communication have changed our world and are influencing a global culture. The ability to google information from anywhere in the world puts technology into the hands of even the most isolated rural communities in the developing world. The more people learn, the more they want to learn. The more they interact, the less likely they will be to fear the unknown. Just as democracy and educational exchange promote peace, the free flow of modern technology and communication promote peace."

*Reconciliation: Islam, Democracy and the West, 2008.*

# CHANCELLOR'S MESSAGE



I welcome you to join one of the best higher education institutions in Pakistan, the Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST).

At SZABIST, you will be taught by highly qualified faculty and will have an opportunity of selecting courses from a variety of traditional and emerging programs that have all been approved by the Higher Education Commission (HEC), Pakistan. SZABIST, living up to its mission of providing opportunity for tertiary education and research to the youth in different areas of Pakistan, has five dedicated campuses:

Karachi, Islamabad, Larkana, Hyderabad, and Dubai (UAE).

At SZABIST, you will become part of a community that believes research to be an integral part of its academic excellence and encourages participation in research and extra-curricular activities, allowing you to realize your true intellectual and professional potential. SZABIST also offers numerous scholarships and financial assistance, to make education accessible and affordable for all its students.

Higher education will play a pivotal role in carving out your professional lives ahead. Choosing the right institution is an important step, hence I wish you all the success in your educational journey, and welcome you to the opportunity to "Discover Yourself".

**Dr. Azra Fazal Pechuho**

Chancellor

SZABIST

# PRESIDENT'S MESSAGE



It gives me immense pleasure to welcome prospective students to Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST). Over the past many years, SZABIST has made remarkable progress in increasing its market reputation both nationally and internationally. This is evident from the increased enrollment in its five campuses-Karachi, Larkana, Hyderabad, Islamabad, and Dubai (UAE) and the expansion in its academic programs.

SZABIST, guided by the vision of its Founding Chancellor, Shaheed Mohtarma Benazir Bhutto, has developed into a leading higher education institu-

tion, offering a range of courses from Biosciences and Mechatronic to Law and Media. SZABIST also provides hi-tech scientific and technological assistance to different industries of Pakistan. The Institute, in compliance with the Higher Education Commission (HEC), has developed curricula which not only relate to prevailing market demand but also prepare students with the knowledge and skills for the future needs of Pakistan's growing economy.

SZABIST maintains a high standard of education. We give priority to highly qualified faculty and professionals who provide a conducive and supportive teaching environment. In addition to a wide spectrum of disciplines as presented in this Prospectus, SZABIST offers exciting opportunities for co-curricular activities. Student societies of SZABIST organize guest speaker sessions, arrange workshops, and build networks with the Alumni and renowned companies for assistance in job placements.

Moreover, SZABIST has one of the highest ranking Quality Enhancement Cells (QECs) of Pakistan. Quality assurance measures are rigorously applied at the university. The department of Institutional Research/Quality Enhancement Cell at SZABIST has implemented a number of quality measures that have enhanced the standard of education and research.

For the youth of Pakistan aspiring for a high quality, relevant education, SZABIST offers a premium learning environment. SZABIST is a perfect platform where students discover their talents and strengths, and overcome weaknesses to achieve their educational, professional, and personal aspirations. This prospectus provides you with comprehensive information about our programs. We hope you will become part of the SZABIST community of students and graduates and ultimately the global network of SZABIST alumni.

**Shahnaz Wazir Ali**

Acting President

SZABIST

# VICE PRESIDENT ADMINISTRATION & FINANCE MESSAGE



A warm welcome is extended to all the potential students of Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST). At SZABIST, we believe in education that helps our students build innovative thoughts and teaches them the value of hard work and diligence. Prospectus 2015 is a testament that today SZABIST has developed into a strong multidisciplinary institution with campuses in Karachi, Hyderabad, Larkana, Islamabad and Dubai.

With the vision of Shaheed Zulfikar Ali Bhutto brought in reality by his daughter Shaheed Mohtarma Benazir Bhutto, and under the guidance of our Chancellor Madam Azra Fazal Pechuho, SZABIST has evolved into a world class institute globally recognized for its excellence in education, research, and in producing highly qualified scientific and technical graduates.

To support the robust academic and research curricula, state-of-the-art facilities and an environment conducive to learning and development is offered to our students.

Our Administration and Academic wings are enthusiastically preparing and looking forward to journeying with you in what will be an exciting period. We are confident that you will enjoy excellence in the respectful and caring environment of our institute.

I hope Prospectus 2015 will serve as a useful guide in planning out your academic tenure at SZABIST.

With best wishes

**Nasreen Haque**

Vice President (Administration & Finance)  
SZABIST

# DIRECTOR ACADEMIC'S MESSAGE



SZABIST is the right choice for all those aspiring to be the best in their chosen field of study. We, at SZABIST, are committed to maintain high standards of teaching and research by providing our students with the latest cutting-edge knowledge, applicable to and fully cognizant of not only local contexts but a fast changing, digitalized global world. Becoming a SZABISTIAN is a testament of the ability and diligence of our student body. Our selection process is rigorous and only those at the top of their class can find a place here.

We offer a wide range of undergraduate and postgraduate programs across the disciplines of Management Sciences, Computer Sciences, Mechatronic Engineering, Social Sciences, Media Sciences, Education and Leadership Management, and Biosciences. In addition, we also have two external programs in affiliation with the University of London, and University of South Wales (UK). With more than 7000 graduates and five campuses, we have our presence across Karachi, Islamabad, Larkana, Hyderabad, and Dubai.

SZABIST has been ranked as one of the top educational institutions of the country by Higher Education Commission (HEC) and Charter Inspection and Evaluation Committee (CIEC), offering programs that are accredited by National Business Education Accreditation Council (NBEAC), National Computing Education Accreditation Council (NCEAC), and Pakistan Engineering Council (PEC). Our highly qualified and experienced faculty is dedicated to enrich the academic experience of our graduates by providing them with a warm and supportive environment for learning, while advising them in terms of their future careers. We are highly appreciative of the diversity of our student body and emphasize upon the values of tolerance and acceptance of difference.

SZABIST is proud of its graduates who are in high demand in the industry. Our alumni are placed in the top management across national and international organizations, making a strong contribution to the development of Pakistan.

**Dr. Tayyaba Tamim**  
Director Academics  
SZABIST

# Discover Yourself



# INTRODUCTION

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) is a highly ranked, fully chartered institute of Pakistan, established through a Legislative Act of Sindh Assembly (Sindh Act No. XI of 1995). It is approved and recognized by the Higher Education Commission (HEC), Pakistan, as a degree awarding institution. All the programs offered at SZABIST, are consistent with the guidelines provided by the HEC and other regulatory bodies, for example, National Business Education Accreditation Council (NBEAC), National Computing Education Accreditation Council (NCEAC), and Pakistan Engineering Council (PEC).

It has five campuses: Karachi, Hyderabad, Larkana, Islamabad and Dubai, with a current student population of over 7000. SZABIST has proudly awarded degrees to over 10,000 talented graduates. Our alumni are sought after by national and multinational organizations and hold key positions in several reputable firms at national and international level.

SZABIST offers undergraduate, graduate and postgraduate degrees in seven different disciplines: Management Sciences, Computer Sciences, Media Sciences, Social Sciences, Education, Mechatronic Engineering and Biosciences. In addition, SZABIST offers two external programs in affiliation with international universities in UK. It offers LLB with the University of London, UK and BA (Hons.) in Business Studies (BABS) with University of South Wales, UK. These programs are at the cutting edge of the latest knowledge in the field, with emphasis on scientific research and intellectual rigour.

In order to further diversify SZABIST portfolio, from Fall 2015, we plan to offer an MS in Educational Leadership and Management, and a PhD in Educational Leadership and Management. SZABIST is also collaborating with the British Council to strengthen the English language support for its students. Computer-based blended learning is an important aspect of this English Language Program. This program is being made flexible and sensitive to the needs of the students for optimum benefit to the learners.

SZABIST is listed as one of the most reputed and highest ranked universities by HEC and Chartered Inspection and Evaluation Committee (CIEC). SZABIST Business School has been rated as “Outstanding” by the Chartered Inspection and Evaluation Committee (CIEC), HEC, Pakistan. In addition, its different programs are accredited by NBEAC; NCEAC and PEC. Furthermore, the programs offered at Dubai Campus are recognized by Knowledge Human and Development Authority (KHDA), Dubai, United Arab Emirates (UAE). The SZABIST-QEC has been ranked in “W” category (the highest category), consecutively, in the last four assessments by Quality Assurance Agency (QAA), HEC, Pakistan.

SZABIST also has the distinction of being ranked among the best business schools, and among the top Science and Technology institutes in Asia by the CNN-Time and Asiaweek. SZABIST is also listed in the CNN Executive Education Schools, 2009. SZABIST, thus, has the unparalleled honor of being the only Pakistani Institute to be recognized internationally by BusinessWeek, Asiaweek, Asia Inc. and CNN.

SZABIST is a registered member of the International Association of Universities (IAU), Paris; Association of Commonwealth Universities (ACU), London; Association of Advance Collegiate Schools of Business (AACSB), Singapore; Federation of the Universities of Islamic World (FUIW), Rabat; Asia University Federation (AUF), Seoul; Asia-Pacific Quality Network (APQN), People’s Republic of China; Management Association of Pakistan (MAP), Karachi; Marketing Association of Pakistan, Karachi; and Human Resource Development Network, Islamabad.

# INTRODUCTION

The institute has signed MoUs with various reputable and distinguished organizations and institutions, such as, University of London, UK; Universal Academic Management Organization (UAMO), UAE; EMC Computer Systems, Austria; Philippines Women University, Philippines; and the Asia Academy of Film and Television, India.

SZABIST Karachi Campus is situated in the prime location of Clifton (Block 5-units 58, 90, 100, 154, and 172) in Karachi. This means easy access and a safe environment. Plans are underway for the construction of a vast purpose-built campus for Management, Computer Science, Social Sciences and Media Sciences, and Bio Sciences departments. Moreover, the construction of a permanent engineering campus spread over 300 acres at the Education City in Malir, about 20 km from the Karachi Toll Plaza and 36 km east of Karachi Airport, and a Medical and Agricultural Complex over 5000 acres at Gharo (about 30 km away from the Education City), are also in the planning phase. SZABIST is proud to offer an education par excellence in the fields that are crucial for Pakistan's socioeconomic development.



# PROGRAMS & CURRICULA

## DEGREES OFFERED

All degrees are not offered at all campuses. Check with the local campus for offered degrees or last page of the prospectus.

### BBA

SZABIST offers a four-year (eight semesters) BBA degree program of 144 credit hours. For the BBA program, the students are required to complete 46 courses and a 6-credit Research Project. The courses include 42 compulsory courses and 4 electives from Management, Marketing, Finance or IT. To obtain the BBA degree, students have to complete 144 credit hours and an internship. The maximum time limit to complete the BBA degree is seven years. Those who complete the BBA degree from SZABIST will get an exemption in ACCA papers F1, F2, F3 and F4. The program is accredited by National Business Education Accreditation Council (NBEAC).

### BS Computer Science

SZABIST offers a four-year (eight semesters) BS Computer Science degree program which is accredited by National Computing Education & Accreditation Council, (NCEAC). The program covers a wide range of courses in core computer science, information technology and software engineering. The program is essentially a day program and consists of 40 courses (five courses per semester) with a total of 130 credit hours. The complete course plan includes 7 technical electives and 2 university electives. These 7 technical electives provide intensive learning in the diversified areas of computer science and allied disciplines. Internship opportunities are provided which is essential to complete as a part of degree requirement. The maximum time limit to complete the BS degree is seven years.

### BE Mechatronic Engineering

SZABIST offers a four-year (eight semesters) BE (Mechatronic Engineering) degree program, which is accredited by PEC (Pakistan Engineering Council). This program has also received 7-Stars by Chartered Inspection & Evaluation Committee (CIEC) Sindh. SZABIST is the only University which offers this program at undergraduate level in the province of Sindh. The program is essentially a day program and consists of 45 courses with a total of 140 credit hours (all electives and certain courses may be offered in the evening). The program is supported through well-equipped state-of-the-art laboratories. Internship opportunities are provided which is essential as a part of degree requirement. The maximum time limit to complete the BE degree is seven years.

### BS Social Sciences

SZABIST offers a four-year (eight semesters) BS Social Sciences degree with majors in Psychology, Sindh Studies, Sociology, Economics, and International Relations. BS Program is essentially a day program and consists of 46 courses (six courses per semester) and a research project with a total of 144 credit hours. The maximum time limit to complete the BS degree is 7 years.

### Bachelor of Media Science

The Department of Media Sciences at SZABIST offers a comprehensive four-year Bachelor of Media Science degree with majors in Film and Television Production, Advertising Strategy & Design, and Journalism. To earn an undergraduate degree, students must enroll in and successfully complete a total of 135 credit hours which includes 43 courses, a 6-credit thesis, and an internship. All students must complete their degree within 7 years.

### BS Biosciences

BS Biosciences at SZABIST is a four-year program spread over eight semesters and consists of 138 credit hours of teaching, 45 courses, an internship of at least six weeks, and a research project. The maximum time limit to complete the BS degree is 7 years.

### EMBA

SZABIST offers a two-year EMBA degree program for executives and middle level managers who strive for excellence and greater challenges in their career. The unique program is specifically designed for those executives who aim to enhance their efficiency and strategic thinking. The individuals will be able to leverage their rich work experience through our curriculum, interactive sessions, conferences, symposia and a wide corporate network. The EMBA program is spread over six semesters and consists of 66 credit hours. Twenty courses, one Business Project (3 credits) and one Research Project (3 credits) are required to graduate. Maximum time limit to complete the EMBA degree is 5 years.

### MBA (Masters in Business Administration)

MBA program has been designed to impart quality professional knowledge and understanding of modern management tools, leadership and entrepreneurial skills, and managerial and communication competencies. The

# PROGRAMS & CURRICULA

program is accredited by National Business Education Accreditation Council (NBEAC).

SZABIST offers both MBA Day and Evening programs with specialized fields of Management, Human Resource Management (HRM), Marketing, Finance, Supply Chain Management, and MIS. A niche MBA program related to Banking & Finance is separately offered besides regular MBA programs. The maximum duration to complete the degree in any MBA program is 5 years.

## **MBA**

### **(36 credit-hour program)**

This program is tailored for students with a four-year BBA degree and the minimum duration to complete the program is 1.5 years. The program comprises 10 courses (30 credits) and Business Research Project (6 credits) OR Academic Research Project (6 credits). Students are also required to complete a 6-week internship to fulfill their degree requirements.

## **MBA**

### **(72 credit-hour program)**

This program is designed for students having a four-year non-business bachelors degree (like BS-CS, BE, MA or M.Sc) or 16 years of education. The duration to complete this program is 2 to 2.5 years. Twenty two courses (66 credits) and Business Research Project (6 credits) OR Academic Research Project (6 credits) are required to complete the program. Students are also required to undertake a 6-week internship along with passing the SZABIST comprehensive exam.

## **MBA**

### **(90 credit-hour program)**

This program is developed for students having a 2-3 year undergraduate degree. The duration of the program is 3 to 3.5 years. Twenty eight courses (84 credits) and Business Research Project (6 credits) OR Academic Research Project (6 credits) are required to complete the program. Students are also required to undertake a 6-week internship along with passing the SZABIST comprehensive exam.

## **MBA Banking & Finance**

### **(36 credit-hour program)**

This program is developed for students with a 4-year BBA degree. The duration of the MBA (B&F) is 1.5 years. Ten MBA courses (30 credits), a Business Research Project (6 credits) OR an Academic Research Project (6 credits) are

needed to graduate. Students are also required to complete a 6-week internship. The maximum duration to complete this degree is 5 years.

## **MBA Banking & Finance**

### **(72 credit-hour program)**

This program is developed for students with a 4-year non-BBA degree/professional degree. The duration of the MBA (B&F) program is 2 to 2.5 years. Twenty-two courses (66 credits) and a Business Research Project (6 credits) OR an Academic Research Project (6 credits) are needed to graduate. Students are also required to complete a 6-week internship and clear the SZABIST comprehensive exam. The maximum duration to complete this degree is 5 years.

## **MPM (Master in Project Management)**

The Master in Project Management is designed to enable individuals to manage complex projects of today through modern project management approaches. MPM is a 1-year evening program comprising 33 credit hours spread over three semesters. Eleven courses are required to graduate. Maximum time limit to complete the MPM degree is 5 years.

## **Master of Advertising**

The Department of Media Sciences at SZABIST offers an evening Master's degree program in Advertising, providing students with a comprehensive training through courses that prepares them to engage in various career options in the advertising industry. To be awarded a Master of Advertising degree, students need to complete a total of 36 credit hours, which includes 10 courses and a 6-credit project. All students must complete their degree within 5 years.

## **Master in Public Health (MPH)**

MPH at SZABIST is a two-year program spread over four semesters and consists of 60 credit hours of teaching. The curriculum includes 22 courses, 16 of 3 credit hours, 3 of 2 credit hours, and a research project (Thesis) of 6 credit hours. The maximum time limit to complete the MPH degree is 5 years.

## **MS Project Management**

SZABIST offers MS in Project Management (MSPM) program equivalent to MPhil. The purpose of this program is to provide research-based project management education, related to a student's field of interest. By providing the requisite skills and knowledge, the program lays the foundation for students planning to

# PROGRAMS & CURRICULA

pursue doctoral studies. The MS program is an evening program and all classes are held during week days. The program consists of six courses (18 credit hours), two independent studies (6 credit hours), and one research thesis (6 credit hours) with a total of 30 credit hours. Students may also opt for two courses in lieu of research thesis. The maximum time limit to complete the MSPM degree is 5 years from the date of admission and the minimum time to complete is 1½ years. As per HEC guidelines all MS Students are required to clear GRE or GAT General Test.

## MS Management Sciences

SZABIST offers MS degree in the specialized areas of Management, Human Resource Management, Marketing, Finance, and Supply Chain Management. The MS program is an evening program and all classes are held during week days. The program consists of six courses (18 credit hours), two independent studies (6 credit hours), and one research thesis (6 credit hours) with a total of 30 credit hours. Students may also opt for two courses in lieu of research thesis. The maximum time limit to complete the MS degree is 5 years from the date of admission and the minimum time to complete is 1½ years (three complete semesters excluding summer semester). As per HEC guidelines all MS students are required to clear GRE or GAT General Test with minimum 50% score.

## MS Computer Science

SZABIST offers MS (CS) degree in three domains: In Core Computer Science area and in two specialization tracks, i.e., Software Engineering (SE) and Networks and Security (N&S). Students are required to complete 3 focused courses in any specific domain.

The program is of 2-year duration and is offered in the evening. It requires 33 credit hours to complete, which consist of 9 courses (27 credit hours) and Thesis/Research Project (6 credit hours). Although students are encouraged to undertake Thesis/Research Project, but they also have an option to take two courses in lieu of the Thesis/Research Project in specific domains.

Eligibility to this program is a 4-year BS (CS) or 2-year MCS degree from a recognized institution. The candidates with a 4-year professional degree (BE, MSc etc.) may also apply, but will require to complete deficiency conversion courses (upto 18 credit hours). The candidates with a 3-year BCS degree shall require to complete one-year deficiency conversion courses (upto 30 credit hours). The can-

didates shall have to submit GRE (General)/GAT (General) score of minimum 50%. The maximum time limit to complete the MS degree is 5 years.

## MS Media Studies

The Department of Media Sciences at SZABIST offers a two-year evening MS degree program in Media Studies designed to prepare students for scholarly research and teaching roles. To be awarded an MS in Media Studies, students need to complete a total of 30 credit hours which include 8 courses and 6 credits of thesis. Students must also pass GAT (General) with a minimum 50% score. All students must complete their degree within 5 years.

## MS Social Sciences

SZABIST offers MS degree in Social Sciences with majors in Psychology, Sindh Studies, Sociology, International Relations, Political Science, Economics, Media Studies, Education, Public Administration, NGO Management, Gender Studies, Philosophy, Law, Human Rights, and Public Policy.

The MS in Social Sciences is an evening program only and consists of 8/10 courses and/or a Thesis/Independent Studies of 30 credit hours. The maximum time limit to complete the MS degree is 5 years.

## MS Educational Leadership and Management

The MS in Educational Leadership and Management is a 1.5 year program spread over three semesters. It is a 30 credit hour program with 6 courses, 2 Independent Research Studies (3 credit hours each) and a Thesis (6 credit hours).

The students will have the opportunity to specialize in the fields of: Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, and Technology.

## MS Biosciences

MS Biosciences at SZABIST is a two-year program spread over four semesters and consists of 30 credit hours of teaching. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours. Students can also take two additional courses in lieu of Thesis in order to complete the total credit hours. The maximum time limit to complete the MS degree is 5 years.

# PROGRAMS & CURRICULA

## PhD

SZABIST offers PhD degree in Management Sciences, Computing, Educational Leadership and Management, and Social Science in strict adherence to the HEC guidelines. The minimum duration required is three years, of which first year is for the course work of 18 credit hours (4 courses and 2 Independent Research Studies) for Social Science, Educational Leadership and Management, and Computing; and 24 credit hours (6 courses and 2 Independent Research Studies) for Management Sciences. The courses are offered in the evening. This is followed by a research work of minimum period of two years. The dissertation which carries a weight of 30 credit hours is required to be completed successfully. The dissertation is sent for evaluation to the two universities in technologically advanced countries. Maximum time limit to earn PhD degree is 7 years. GRE (Subject)/GAT (Subject) score of minimum 60% is required to be submitted at the time of admission.

In Management Sciences, specializations include Human Resource Management, Marketing, Finance, and Supply Chain Management.

PhD Computing can be done in various specialized areas/disciplines related to pure or applied Computer Sciences. The specializations include, but not limited to, Database Management Systems, Management Information Systems, Data Warehousing, Data Mining, Networking & Communication, Business Intelligence, Process Modeling, Telecommunication, Mobile Communication, Mobile Computing, Technology Management, Artificial Intelligence, Software Engineering, Agent Systems, Speech Recognition, Multimedia Systems, HCI, E-Business, Mechatronic, Machine Vision, Image Processing and any other area which falls in the purview of computer sciences/computing.

In Social Sciences, specialized areas include Economics, International Relations, Political Science, Media Studies, Education, Public Administration, NGO Management, Gender Studies, Philosophy, Psychology, Sociology, Law, Human Rights and Public Policy.

In Educational Leadership and Management, specializations may include Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, and Technology.



# ADMISSION REQUIREMENTS

## NOTE:

- All applicants will be required to appear in entrance test and interview/group discussion at SZABIST.
- General paper (A Levels) will not be counted.
- Equivalency from Inter Board Committee of Chairmen (IBCC), if applicable.
- Verification of last degree from Higher Education Commission of Pakistan, (HEC).
- Students waiting for results can also apply (including first year with no supplementary).

## BACHELORS

### BBA/BS Programs

For admission in the BBA/BS programs, the candidate must have completed A-levels (minimum 3-passes)/12th Grade/Intermediate with minimum 50% marks (including first year with no supplementary) or equivalent from a recognized institution.

For BS Computer Science, candidates with mathematical background will be preferred.

### BS Biosciences

Candidates are required to have 50% marks in Intermediate (FSc) or 3 A Level passes in at least two subjects (Biology, Chemistry, and Physics).

### BE Mechatronic Engineering

The candidate must have completed Intermediate (Pre-Engineering)/A-levels or equivalent with a combination of (Physics, Chemistry and Mathematics) with minimum 60% marks.

For the candidates who have obtained Cambridge High School Certificate with Mathematics, Physics and Chemistry subjects, equivalency of their grades are obtained as follows:

A-Level Grade	Equivalent Intermediate %
A	85
B	75
C	65
D	55
E	45

Candidates with DAE (Mechanical/ Electronics/Electrical/ Instrumentation) having at least 60% aggregate marks from an institute recognized by the Government can also apply.

## MASTERS

### EMBA

For admission in the EMBA program, the candidate must possess a Bachelors degree with minimum 50% marks/ CGPA of 2.5 from a university recognized by the Higher Education Commission (HEC) in any field of study with 4 years of managerial-level work experience.

Candidates with a minimum GMAT Score of 600, secured in the last 2 years are exempted from the admission test.

### MBA

#### (36 credit-hour program)

For admission in the MBA 36 credit-hour program, the candidate must possess a 4 years BBA or relevant business degree with minimum CGPA of 2.5 from a university recognized by the Higher Education Commission (HEC).

#### (72 credit-hour program)

For admission in the MBA 72 credit-hour program, the candidate must possess a 4 years non-business bachelor degree with minimum CGPA of 2.5 or 16 years of education with minimum 55% marks from a university recognized by the HEC.

#### (90 credit-hour program)

For admission in the MBA 90 credit-hour program, the candidate must possess 14 years education with minimum CGPA of 2.5 or minimum 55% marks from a university recognized by the HEC.

### MBA (Banking & Finance)

All those candidates who have either 4-year BBA degree or 4-year professional degree (with minimum CGPA 2.5) or 16 years of education (with minimum 55% marks) from a university recognized by the HEC will be eligible to apply for admission. Students with a 4-year BBA degree will be exempted from first year and will be given a direct entry in second year.

### MPM (Master in Project Management)

For admission in the MPM program, the applicant must possess a minimum of sixteen (16) years of education/ 4-year Bachelor/Masters degree from an HEC recognized educational institute with minimum 55% marks/CGPA 2.5.

# ADMISSION REQUIREMENTS

## Master of Advertising

Students with a 4-year undergraduate degree or 16 years of equivalent education with minimum 55% marks/CGPA 2.5 from a university recognized by the HEC are eligible to apply.

## Master in Public Health (MPH)

For admissions in the MPH program, candidates must possess 16 years of education or 4 years of education after H.S.C. (Intermediate) in any field of biological sciences with minimum 55% marks/CGPA 2.5 from a university recognized by HEC or PMDC. Applicants with MBBS, BDS, B-Pharm degrees or M.Sc. degree in any biological field with minimum 55% marks/CGPA 2.5 are eligible to apply.

## MS Project Management

All those candidates who have either 4 years BBA degree or 4 years professional degree (with minimum CGPA 2.5) or 16 years of education (with minimum 55% marks) from an HEC recognized university will be eligible to apply for admission in MSPM program. Candidates are also required to pass GAT General with minimum 50% score.

## MS Educational Leadership and Management

All those candidates who have either 4 years BBA degree or 4 years professional degree (with minimum CGPA 2.5) or 16 years of education (with minimum 55% marks) from an HEC recognized university will be eligible to apply for admission in MS ELM program. Candidates are also required to pass GAT General with minimum 50% score.

## MS Media Studies

For admission in MS Media Studies, candidates must possess a 4-year undergraduate degree or 16 years of equivalent relevant education (Social Sciences, Humanities, or Media) with minimum 55% marks/CGPA 2.5 from a university recognized by HEC. Candidates are also required to pass GAT General with minimum 50% score.

## MS Biosciences

For admissions in the MS program, candidates must possess 16 years of education in any field of life/biological sciences with minimum 55% marks/CGPA 2.5 from a university recognized by HEC. GAT (General) is mandatory for MS students with minimum 50% score.

## MS Programs

For admission to MS program (Management Sciences, Computer Science & Social Sciences) candidates must possess 16 years of relevant education with minimum 55% marks/CGPA 2.5 from a university recognized by HEC. GAT (General) is mandatory for MS students with minimum 50% score.

## Doctoral Degree

### Admission Requirement

A candidate with MA/MS/MBA/MPhil or any other equivalent degree with minimum 5.5 years of formal university education in the relevant field from an HEC recognized local or foreign university may apply for direct admission in a PhD program. To apply for admission in PhD program the candidate must have minimum 3.0 CGPA, cleared the admission test and interview, and passed GAT (subject) with minimum 60% score.

A student may be asked to complete other pre-requisite/deficiency courses/thesis before taking PhD level courses. The decision of number of pre-requisite courses is taken by the Admissions Committee of relevant department. For non-relevant degrees, the candidate will be required to register for additional Masters level courses as pre-requisites as per the guidance provided by the Admissions Committee.

### Degree Requirements

For completion of the PhD degree, the student must complete a total of 48 credit hours (18 credit hours course and 30 credit hours for dissertation) for Social Sciences, Educational Leadership and Management, and Computer Science; and 54 credit hours (24 credit hours course and 30 credit hours for dissertation) for Management Science.

### PhD Degree Milestones

- Clearing admission requirements
- Completing course work with required CGPA
- Passing comprehensive examination
- Clearing proposal defense
- Completing dissertation
- Completing publication requirements
- Clearing progress seminar(s)
- Clearance from external examiners
- Dissertation Defense (Open Seminar)

Two interdisciplinary courses can be allowed with the

# ADMISSION REQUIREMENTS

approval of both relevant Program Managers subject to the relevancy of courses.

## Comprehensive Examination

All PhD students must pass the PhD Comprehensive Examination after completion of the required coursework. A student must clear the comprehensive examination in maximum two attempts. After successfully passing the comprehensive examination the candidate will get PhD Candidacy and he/she will be assigned a research supervisor.

## Research Proposal

The candidate shall prepare a research proposal under the guidance of research supervisor. The first registration in Dissertation will be for 6 credit hours in which the student will work on Proposal for Dissertation. These 6 credits will be counted/included in 30 credit hours of dissertation. The PhD research proposal must be presented before the Evaluation Committee. Maximum two attempts are allowed for research proposal.

## Dissertation

A student may register for 3, 6, 9 or 12 credit hours in regular semesters (Spring or Fall) and 3 credit hours for Summer semester. Registration in first proposal (6 credit hours) is not allowed in Summer semester. The dissertation may normally be completed within minimum 2 years after the completion of course work. Maximum time limit to complete PhD degree is seven years (including both course work and dissertation).

## Publication Requirements

All PhD candidates are required to write at least one research paper from their dissertation and submit it for publication in a refereed journal recognized by the HEC. This paper must at least be provisionally accepted by the journal before the presentation of the final progress seminar. It is normally expected that the paper will be submitted before submission of dissertation.

## Progress Seminar(s)

Before sending the dissertation to the external evaluators belonging to technologically advanced countries, the candidate has to demonstrate his or her work in front of a panel of experts for the necessary changes if deemed required.

## Final Defense

After receiving minimum two successful evaluation

reports from the external evaluators, the candidate is required be asked to appear for his/her PhD Final Defense by making a formal presentation of the Dissertation to the Evaluation Committee in an open seminar along with viva voce.

## Admission Test Alternates

Applicants may submit a minimum 1650 score of SAT 1 for (BBA/BS/BE), 50% score of GMAT for (MBA), 600 score of GMAT for (EMBA), GAT (General)/GRE for MS (Management Sciences), MS (Computer Science), MS (Social Sciences), MS (Educational Leadership and Management) & MS (Media Studies) and GAT (subject) for PhD.

GAT General is mandatory for MS with minimum 50% score. GAT Subject is mandatory for PhD with minimum 60 % score.

## Transfer Policies

Transfer into SZABIST can only be accepted for candidates who have studied or are currently studying at HEC recognized universities. Transferring credits must have a minimum letter grade of B or above (or 80% marks). The request for transfers must be made at the time of admission. The maximum time limit to transfer courses is two years. Candidates will be required to clear all SZABIST admission requirements.

## Bachelor Course Transfer

A maximum of up to 50% credits may be considered for transfer into BBA/BS/BE programs.

## MBA Course Transfer

- A maximum of up to 6 credits may be considered for transfer into the fifth year MBA (36 credit hours) program. Research Project course is not transferable.
- A maximum of up to 36 credits may be considered for transfer into the MBA (72 credit hours) program. Research Project course is not transferable.
- A maximum of up to 45 credits may be considered for transfer into the MBA (90 credit hours) program. Research Project/thesis course is not transferable.
- Only relevant courses of the EMBA (SZABIST) program are transferable into the regular MBA program subject to the eligibility criteria of the MBA program at SZABIST.

# ADMISSION REQUIREMENTS

## **MPM, MoA & MPH Course Transfer**

A maximum of up to 6 credits may be considered for transfer into the MPM, MoA & MPH programs.

## **EMBA Course Transfer**

No transfer courses are allowed into the EMBA program at SZABIST.

## **MS Course Transfer**

Up to 50% of total course work completed at an HEC recognized university can be allowed for transfer at SZABIST MS program.

## **PhD Course Transfer**

Transfer of courses up to 6 credit hours from an HEC recognized university may be allowed in special cases by making a petition to the Graduate Committee before formal acceptance into the PhD Program. The student may be required to take additional courses as recommended by the Graduate Committee. The student must complete 48 credit hours in total.

## **SZABIST Inter-Campus Transfer**

For Inter-Campus transfer, the candidate must fulfill the admission requirements of the local campus she/he wishes to transfer to, as per applicable transfer policy.

All courses/grades are transferable. A transfer fee will be payable for students transferring from any other SZABIST campus.

## **Certificate Course Transfer**

For transfer candidates from the SZABIST Certificate Programs, all courses having a letter grade C- or above for the BBA/BS/BE/MBA and grade B or above for MS/PhD are transferable within one year.

## **Financial Assistance**

SZABIST provides a wide range of financial assistance to eligible and deserving students. For instance:

- SZABIST Need-Based Scholarships
- SZABIST Merit-Based Scholarships
- Sindh Endowment Fund Scholarships
- Balochistan Endowment Fund Scholarships
- Khyber Pakhtunkhwa Chief Minister's Endowment Fund
- Pak-USAID Merit and Need-Based Scholarships
- HEC-Indigenous PhD 5000 Fellowship Program
- National ICT R&D Fund Scholarships

- NTS Need-Based Scholarship Program
- Ihsan Trust's Qarz-e-Hasna Facility
- Minority Scholarships
- Various community scholarships

All scholarships cover tuition fee. However, in some cases, scholarships also cover books, boarding, transportation, monthly stipend, and admission fee.

Financial assistance is also available to qualified PhD candidates in the form of teaching assistantship, associate-ship, and adjunct faculty positions.

All requests for financial assistance must be made after admission.



# LIFE AT SZABIST

## FACILITIES

### Video Conferencing

SZABIST is the first educational institute in Pakistan that introduced multi-way interactive Video Conferencing (VC) technology in 2001. SZABIST regularly uses VC technology in interactive learning sessions between Dubai, Islamabad, Larkana, Hyderabad and Karachi Campuses, as well as in conducting seminars/lectures/ presentations with foreign universities. Video Conferencing has been the most effective mode at SZABIST in bringing in live and interactive guest lecturers from experts outside the country. Video Conferencing technology opens the door to exciting and valuable learning experiences. By allowing access to and interaction with resources that might have otherwise been too inconvenient or expensive, Video Conferencing ensures a highly enriched learning environment. By taking the lead in opening this field in educational practices, SZABIST has also taken lead in creating the most advantageous nexus between cutting-edge technology and effective learning.

### Conferences/Forums/Seminars/Guest Lectures

To increase awareness and understanding of information technology and business-related issues, many conferences, forums, seminars and guest lectures are organized. These seminars and lectures are in continuation of the Institute's policy towards entrepreneurship development and networking. Seminars are conducted/attended by the leading figures from business and industry as these sessions address various business practices.

### Business Productivity Courses

The Institute also offers several productivity-oriented certificate courses as part of its continuing education program. The courses are developed jointly by the faculty, specialists and certified trainers in specific subject areas. The aim of these courses has been to initiate discussion and modeling of practical problems, new business opportunities or improve understanding of current issues in Information Technology, Business and Management. These courses include topics such as e-Commerce, New Programming Languages & Tools, Business & Entrepreneurship Management, Selling Skills, Conflict Resolution, Effective Leadership, and Productivity, Quality-Related Issues, Brand Management and Digital Marketing.

In addition to business productivity courses, the Institute arranges study groups, mentor workshops and courses for students who it may feel are deficient in various academic areas. These courses include Business Communication,

Technical Writing, Public Speaking, Personal Grooming, Interviewing Techniques and Statistical Package for Social Sciences (SPSS).

### Classrooms/Labs/Libraries

Classroom sessions at SZABIST are quite different from other professional university setups. Teachers pay individual attention, thanks to the limited number of candidates selected purely on merit. Instructors encourage participation instead of a monologue. Students utilize various visual aids for presentations and are always on alert because of the regular unannounced quizzes, assignments and the mid-term exams. All classrooms are air-conditioned and are equipped with multimedia projectors, wall mounted screens and white boards. All classrooms are equipped with PCs along with broadband intranet/internet connectivity.

SZABIST computer laboratories are equipped with high-end computers to cater to students requirements. "Campus licensing" of latest software, including development tools, and OSs provide an unmatched environment compared to majority of well-reputed universities of Pakistan.

SZABIST has computing facilities supported with full 24x7 broadband connectivity of 38 Mbps Committed bandwidth to the internet and intranet. SZABIST is Wi-Fi enabled since 2002. Students with 802.11x capable devices (such as laptops, iPads, Cellphones, etc.) can access all network resources wirelessly.

SZABIST library is subscribed to a number of digital online libraries, journals, and databases through which students can access an unlimited number of journals and magazines. This facility is further extended to registered students through SZABIST network on demand. Moreover, SZABIST has its own Research Centers i.e., Centre of Renewable Energy Research (CRER), and Sustainable Development Research Centre (SDRC) with their own specialized library for reference and general reading.

## EXECUTIVE DEVELOPMENT CENTER

The Executive Development Center (EDC) at SZABIST, Karachi, facilitates students in completing their degree requirements, professional development, and job/internship placements.

Throughout their academic tenure, the students are encouraged to attend customized trainings, personal development programs and presentations by industry experts who share their experiences to help them understand the transition

# LIFE AT SZABIST

from campus to the corporate world.

EDC compiles students' profiles and publishes the annual Graduate Directory in order to market SZABIST graduates to credible organizations. Graduate Directory is a useful tool to facilitate job placements.

EDC engages with the Alumni for relationship building, corporate networking and profile update. Its latest initiative is the launch of SZABIST Alumni Global Association (SAGA).

## Job & Internship Placements

In collaboration with the industry, EDC arranges on-campus recruitment drives and management trainee programs by reputable national and multinational companies. EDC facilitates students for internships and job openings in the corporate sector throughout the year.

An annual 'Career Fair' is held at the campus in which leading companies are invited to discuss their recruitment policies and procedures, their current resource requirements and future vacancies, and interact directly with the students.

To bridge the gap between classroom and work situation, SZABIST has instituted a mandatory internship program. Apart from enabling students to get the feel of an office environment, internships expose them to potential employers for possible recruitment.

## Eligibility for Internship

- Masters Degree students with at least two semesters completed at SZABIST.
- Bachelors degree students with at least six semesters completed at SZABIST.
- Minimum duration of internship is six weeks.

Preference is given to those students who are about to graduate and need an internship as a requisite for their degree completion.

## LIFE ON CAMPUS

### SZABIST Student Council and Student Societies

Amidst all the academic pressures and workload, SZABIST's students find time for leisure. Seminars, workshops, projects, on- and off-campus events and dinners are a regular feature of the life of a SZABISTian. To support extra and c-curricular activities, various clubs and student societies are established

by students for curricular and extracurricular activities. SZABIST also has an excellent student representation body, The SZABIST Student Council (SSC), which is a student-elected body, help create an environment that fosters creativity, initiative and confidence, with the help of its following constituent societies:

<b>ACM:</b>	Association of Computing Machinery (SZABIST Karachi, ACM Chapter)
<b>ASME:</b>	American Society of Mechanical Engineers
<b>CURTAINS:</b>	Performing Arts Society
<b>IEEE-SSB:</b>	Institute of Electrical and Electronics Engineers-SZABIST Student Branch
<b>KSCLC:</b>	Karachi SZABIST Campus Lions Club
<b>RCoSKM:</b>	Rotaract Club of SZABIST Karachi Midcity
<b>SES:</b>	SZABIST Entrepreneurial Society
<b>SLC:</b>	SZABIST Literary Club
<b>SSS:</b>	SZABIST Sports Society
<b>SSSS:</b>	SZABIST Social Sciences Society
<b>SBS:</b>	SZABIST Biosciences Society

SZABIST also has the following, non-SSC societies that are providing an exceptional platform for leadership, citizenship and debate:

<b>AIESEC:</b>	Student Exchange Program Facilitation
<b>SLS:</b>	SZABIST Law Society
<b>ZABMUN:</b>	SZABIST Model United Nations

## Newsletters

SZABIST publishes "SZAB'nings" from Karachi, "ZABNEWS" from Larkana and Islamabad and "INSIGHT" from Dubai. All previous issues of these publications and information on ongoing activities and events are available on the SZABIST's website.

## International Linkages and Collaborations

SZABIST is a registered member of the following international and national associations:

1. International Association of Universities (IAU), Paris
2. Association of Commonwealth Universities (ACU), London
3. The Association to Advance Collegiate School of Business (AACSB), Singapore
4. Federation of the Universities of Islamic World (FUIW), Rabat
5. Asia University Federation (AUF), Seoul
6. Asia-Pacific Quality Network (APQN), People's Republic of China

# LIFE AT SZABIST

7. Management Association of Pakistan (MAP), Karachi
8. Marketing Association of Pakistan (MAP), Karachi
9. Human Resource Development Network (HRDN), Islamabad

Moreover, SZABIST has signed MoUs, articulation and collaboration agreements with the following universities and institutions:

## **1. National Testing Services (NTS)**

As per the MoU, SZABIST PhD students can benefit from NTS Need-Based Scholarships on qualifying NTS General Assessment Test.

## **2. Association of Chartered Certified Accountants (ACCA)**

This MoU accredits SZABIST BBA program for exemptions in four ACCA papers.

## **3. ACCA Accelerate**

Through this collaboration, SZABIST BBA students and alumni will benefit from a substantial fee waiver in acquiring ACCA professional qualification.

## **4. Alliance Francaise, Karachi**

The MoU with AF confirms the partnership between SZABIST and Alliance Francaise, Karachi in organizing the SZABIST Annual Media Festival 2014.

## **5. British Council and Scottish Documentary Institute (BCSDI)**

The MoU facilitates collaboration between SZABIST and BCSDI on a documentary film project that will entail screening of a selection of films from the 'Stories' project of Scottish Documentary Institute (SDI) and a talk about SDI's work by Professor Noemie Mendell.

## **6. US Department of State's Bureau of Educational and Cultural Affairs**

Under the MoU, the US Department of State's Bureau of Educational and Cultural Affairs and University of Southern California's (USC) School of Cinematic Arts will conduct two-day workshop at SZABIST Karachi campus for the students of Media Sciences Department.

## **7. National ICT R&D Fund**

According to this partnership, eligible and deserving students enrolled in ICT-related programs will be provided scholarship covering 100% tuition fee and stipend for lodging, books, transportation, and food.

## **8. Ihsan Trust**

The MoU with Ihsan Trust is aimed at provision of Qarz-e-Hasna (Interest-free Loan) facility up to 50% of tuition fee to SZABIST students.

## **9. FM 100 (Capital FM, Pvt. Limited, Media Group), Islamabad**

The MoU is aimed at exploring cooperation between SZABIST and FM 100 in radio projects and capacity building initiatives, and networking and linkages events on diversified subjects.

## **10. Nur Center for Research & Policy, Lahore**

The MoU facilitates collaboration for internships, trainings, research and consultancy projects, and organizing policy advisory forums across Pakistan and in the Middle East and South Asian region.

## **11. ARK Consulting Group, Islamabad**

Under the collaborative agreement, SZABIST and ARK will jointly conduct series of professional workshops and diploma programs.

## **12. Pakistan Television (PTV) Corporation, Islamabad**

The MoU pertains to cooperation in areas such as research, trainings and internships, employment, exchange of experts, access to archival materials, and other capacity building activities.

## **13. American Abroad Media (AAM)**

According to the partnership, SZABIST students will be involved in the studio taping of the four Afghanistan-Pakistan town hall series.

## **14. Organization of Pakistani Entrepreneurs of North America (OPEN)**

The MoU pertains to jointly establishing a student chapter of OPEN at SZABIST, namely 'OPEN SZABIST Karachi Student Chapter' to promote the spirit of entrepreneurship among Pakistani youth through personality assessment, seminars, workshops, individual mentoring sessions by qualified professionals, and other related activities.

## **15. Rotary Club, Islamabad, (Pakistan-Afghanistan), Rotary International**

The MoU is aimed at exploring and strengthening collaboration in research projects and capacity building initiatives on diverse subjects of common interest.

# LIFE AT SZABIST

## **16. Human Resource Development Network (HRDN), Islamabad**

The MoU with HRDN is aimed at exploring and strengthening collaboration in research projects and capacity building initiatives, networking and linkages on diverse subjects of common interest.

## **17. Ozair Hanafi School of Learning (OHSOL)**

Under the MoU, SZABIST and OHSOL would collaborate to strengthen the culture and spirit of entrepreneurship in the country and among the students.

## **18. Universal Academic Management Organization (UAMO), UAE**

Under the collaborative agreement, UAMO will offer credited and non-credited academic and training programs at SZABIST Dubai campus.

## **19. UN Global Compact Pakistan Local Network Project**

The MoU pertains to the development of three case studies on the best socially responsible practices in the country.

## **20. George Mason University (GMU)**

The MoU confirms SZABIST's participation with GMU's School of Public Policy for providing higher education solution services to the United States Agency for International Development (USAID) and its units.

## **21. Peritus, Islamabad**

The MoU promotes cooperation between SZABIST and Peritus in research projects and capacity building activities on diversified subjects.

## **22. KalSoft Pvt. Ltd., Pakistan**

The MoU facilitates joint research, workshops and seminars, and sharing of knowledge and expertise.

## **23. AGEHI Resource Centre SACHET, Pakistan**

The MoU facilitates joint research, dialogue among scholars, faculty exchange, joint diploma or certificate courses, and various capacity building activities.

## **24. The International Committee of the Red Cross (ICRC)**

The MoU pertains to ICRC's financial contribution to SZABIST Law Society's International Humanitarian Law Moot Court.

## **25. EMC Computer Systems Austria GmbH**

Under the agreement, EMC shall facilitate the students of SZABIST enrolled in the IT program with free-of-cost elective education programs and possible employment with EMC.

## **26. Australian Institute of Entrepreneurship (AIE)**

The MoU allows AIE and SZABIST to work on enriching vocational education in Pakistan with innovative and dynamic entrepreneurship programs.

## **27. The University of South Wales**

Under the agreement, University of South Wales will confer its degree to SZABIST students on completion of their final year, to be attended in UK, of the undergraduate program BA (Hons) Business Studies.

## **28. State University of New York at Buffalo (SUNYAB)**

The MoU relates to SUNYAB working with SZABIST in the fields of food sciences and technology, animal and plant genetics, textile engineering, electrical engineering, marine biology, and mining engineering.

## **29. Asia Academy of Film & Television (AAFT), Noida, India**

The MoU pertains to the development of programs in media arts and sciences including joint seminars, skill development programs, and student, staff, and faculty exchange.

## **30. The Philippines Women's University (PWU), Manila**

The MoU is aimed at promoting the educational, social and economic well-being of students and faculty through joint seminars, exchanges, and visits.



# LIFE AT SZABIST



# FACULTY OF MANAGEMENT SCIENCES



## FACULTY OF MANAGEMENT SCIENCES

SZABIST prepares students for leadership roles in business. SZABIST offers multidisciplinary course work to provide students with an understanding of the functioning and complexities of the corporate world. The course work at SZABIST is an intensive study in the latest curriculum through activity-and strategy-based methodology, and offers concentration in Management, Marketing, Finance, Human Resource Management, and IT.

## PROGRAM AND FACULTY

Every effort has been made to design an academic program at SZABIST which conforms to standards of internationally recognized universities and caters to the needs of businesses and industry.

# FACULTY OF MANAGEMENT SCIENCES

## BBA

SZABIST offers a four year BBA degree program of 144 credit hours. For the BBA program, the students are required to complete 46 courses and a 6-credit Research Project. The courses include 42 compulsory courses and 4 electives from Management, Marketing, Finance or IT. To obtain the BBA degree, the students have to complete 144 credit hours and an internship. The degree needs to be completed within seven years. Those who complete the BBA degree from SZABIST will get an exemption in ACCA papers F1, F2, F3 and F4.

### First Year

#### Fall Semester

- BA 1101 Introduction to Accounting
- BA 1204 Maths for Business
- BA 1105 English Writing Skills
- BA 1106 Islamiat and Pakistan Studies/Humanities
- BA 1108 IT in Business
- BA 1109 Personal Management and Communication

#### Spring Semester

- BA 1201 Financial Accounting
- BA 2311 Business Statistics
- BA 1203 Management Principles
- BA 1102 Microeconomics
- BA 1206 Oral Communication and Presentation Skills
- BA 1211 Logic and Critical Thinking

### Second Year

#### Fall Semester

- BA 2301 Introduction to Business Finance
- BA 2303 Marketing Principles
- BA 2307 Sociology
- BA 1202 Macroeconomics
- BA 2312 Human Behavior
- BA 2408 Cost Accounting

#### Spring Semester

- BA 2401 Money and Banking
- BA 2402 Retail Management
- BA 2403 Business Ethics
- BA 2406 Business and Electronic Communication
- BA 3504 Organizational Behavior
- BA 3507 Consumer Behavior

### Third Year

#### Fall Semester

- BA 3501 Financial Markets and Institutions
- BA 3508 Media Management
- BA 3605 Statistical Inference
- BA 4706 Development Economics
- BA 4801 Law and Taxation
- BA xxxx Optional-I (as offered by Campus)

#### Spring Semester

- BA 3601 Financial Management
- BA 3602 Marketing Management
- BA 3607 Operations Management
- BA 3603 Business Research Methods
- BA 4804 Human Resource Management
- BA xxxx Optional-II (as offered by Campus)

### Fourth Year

#### Fall Semester

- BA 3505 Quantitative Skills
- BA 4704 Management Information Systems
- BA 4705 Services Marketing
- BA 4814 Project Management
- BA 4xxx Elective-I
- BA 4xxx Elective-II

#### Spring Semester

- BA 3502 Entrepreneurship
- BA 3609 Pakistan Economy
- BA 4807 Research Project\*\*
- BA 4xxx Elective-III
- BA 4xxx Elective-IV

Optional Courses (To be offered by the campus as Compulsory courses)

# FACULTY OF MANAGEMENT SCIENCES

BA 3519 Current Affairs  
BA 3506 Foreign Languages  
BA 3619 Enterprise Management  
BA 3614 Business Analysis and Forecasting\*  
BA 4707 Marketing Research\*  
BA 4701 Islamic Banking and Finance\*  
BA 4842 Graphic Design for Multimedia\*

## ELECTIVES

### Management

BA 4116 Supply Chain Management  
BA 4117 Salary and Compensation  
BA 4711 Change Management  
BA 4712 Industrial Relations and Labor Laws  
BA 4713 Leadership and Motivation Techniques  
BA 4813 Training and Development  
BA 4815 Event Management  
BA 4826 Talent Management  
BA 4812 Recruitment and Selection  
BA 4844 Operations Research

### Marketing

BA 4707 Marketing Research\*  
BA 4116 Supply Chain Management  
BA 4217 Experiential Marketing  
BA 4721 Advertising  
BA 4722 Brand Management  
BA 4815 Event Management  
BA 4816 Industrial Marketing  
BA 4824 Sales Management  
BA 4842 Graphic Design for Multimedia\*  
BA 4739 Export Marketing  
BA 4125 Emerging Media  
BA 4821 Media Planning  
BA 4859 Product Innovation and Design

### Finance

BA 4218 Financial Research  
BA 4719 Investment Banking  
BA 4732 Corporate Finance  
BA 4734 International Banking  
BA 4831 Portfolio and Investment Management  
BA 4833 Security Analysis  
BA 4834 Treasury and Funds Management  
BA 4855 Financial Risk Analysis

BA 4752 Financial Reporting and Analysis  
BA 4756 Econometrics  
BA 4115 Derivatives  
BA 4724 Financial Modeling  
BA 4701 Islamic Banking and Finance\*  
BA 3614 Business Analysis and Forecasting\*

### Information Technology

BA 4224 e-Marketing Strategies  
BA 4714 e-Business and e-Commerce Management  
BA 4745 Information System Audit  
BA 4822 Media Production  
BA 4842 Graphic Design for Multimedia\*  
BA 4844 Operations Research

\*Optional courses can be taken as an Elective if not offered by Campus as a compulsory course.

\*\*Research Report may be substituted with BA 47XX Research Project-1 (3 Credit Hours) and BA 48XX Research Project-2 (3 Credit Hours), to be offered over two semesters, as per the requirement of the campus.

All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required. Full-time academic load is 18 credit hours. All students are required to register for full load in the first semester.

## INTERNSHIP

The internship is scheduled for summer at the end of third year. After completion of the 6-week internship, all students are required to submit a comprehensive report giving details of their experience and learning.

## BABS - CONTINUATION 3rd & 4th Year

SZABIST offers a 3 year BA (Hons) degree in Business Studies from the University of South Wales. Students will complete two years at SZABIST and proceed ahead to complete the third year from University of South Wales and earn an international degree.

Students who wish to complete the degree at SZABIST can also do so by opting for the 3rd & 4th year of BABS program. Those who opt for this continuation program will then stay in this program and will not be allowed

# FACULTY OF MANAGEMENT SCIENCES

to move to the BBA program. The fee structure will be the same. Students will have to give a test in order to comply with the HEC regulations.

## Third Year

### Fifth Semester

- BA 1106 Islamiyat and Pakistan Studies/Humanities
- BA 4804 HRM
- BA 2406 Business and Electronic Communication
- BA 3517 Entrepreneurship and Small Business Management
- BA 3603 Law for Managers

### Sixth Semester

- BA 3617 Introduction to International Business
- BA 3501 Money and Banking
- BA 3616 Customer Relationship Management
- BA 3618 Leadership Development
- BA 3519 Current Affairs

## Forth Year

### Seventh Semester

- BA 3507 Consumer Behavior
- BA 3501 Financial Markets and Institutions
- BA 4824 Sales Management
- BA 3603 Business Research Methods
- BA 4703 Staffing/Compensation and Employee Development

### Eighth Semester

- BA 4807 Research Project
- BA 4226 Customer Services and Excellence
- BA 4225 Business Strategy
- BA 4128 Operations and Supply Chain Management
- BA 4127 Managing Across Global Environment

*All courses may not be offered every year. Alternate courses may be substituted as and when required*

## EXECUTIVE MBA

The EMBA is a 2-year program spread over six semesters and consists of 66 credit hours of teaching. Twenty courses, 1 Business Project (3 credits) and 1 Research Project (3 credits) are needed to graduate. Maximum time limit to complete the EMBA degree is 5 years.

## First Year

### Fall Semester

- BE 417 Accounting for Business
- BE 447 Managerial Communication
- BE 451 Business Application of IT
- BE 492 Business Management

### Spring Semester

- BE 413 Quantitative Analysis for Decision Making
- BE 415 Contemporary Marketing
- BE 416 Organizational Behavior
- BE 421 Economics for Business
- BE 443 Entrepreneurship and Family Businesses

### Summer Semester

- BE 414 Business Finance
- BE 418 Business Research Methods

## Second Year

### Fall Semester

- BE 423 Human Resource Management
- BE 434 Marketing Management
- BE 478 Business Project
- BE 4xx Elective-I (Marketing, HR, Finance and Supply Chain)

### Spring Semester

- BE 419 Strategic Management
- BE 444 Ethics and Corporate Governance
- BE 445 Managerial Accounting and Control
- BE 4xx Elective-II (Marketing, HR, Finance and Supply Chain)
- BE 4xx Elective-III (Marketing, HR, Finance and Supply Chain)

# FACULTY OF MANAGEMENT SCIENCES

## Summer Semester

- BE 448 Research Project (3 Credits)  
BE 449 Operations and Supply Chain Management

## ELECTIVES

### Marketing

- BE 473 Advertising  
BE 474 Brand Management  
BE 436 Retail Management  
BE 432 Services Marketing  
BE 472 Media Planning and Management  
BE 484 Consumer Behavior

### Finance

- BE 481 Corporate Finance  
BE 424 International Banking and Finance  
BE 482 Islamic Banking and Finance  
BE 487 Portfolio and Investment Management

- BE 488 Project Evaluation  
BE 483 Analysis of Financial Statements

### Human Resource Management

- BE 427 Leadership and Motivational Techniques  
BE 471 Compensation Management  
BE 486 Training and Development  
BE 476 Recruitment and Selection  
BE 485 Performance Appraisal

### Supply Chain Management

- BE 428 Supply Chain Management  
BE 493 Dynamics of Logistics and Distribution  
BE 494 Operational Planning in Supply Chain  
BE 495 Strategic Procurement in SCM

*The University reserves the right to change its programs and policies at any time without prior notification. All courses may not be offered every year. Alternate courses may be substituted as and when needed.*

## MBA PROGRAM

*(36 credit hours program for students with 4-year BBA degree)*

For students with a 4-years BBA degree, the duration of the MBA is 1.5-years. Ten MBA courses (30 credits) and Business Research Project (6 credits) OR Academic Research Projects (6 credits) are needed to graduate. Students are also required to complete a 6-week internship. The maximum duration to complete this degree is 5 years.

### First Year

#### Fall Semester

- BA 5501 Applied Research Methods  
BA 5104 Strategic Management  
BA 5xxx Elective-I  
BA 5xxx Elective-II

#### Spring Semester

- BA 5203 Strategic Marketing  
BA 5601 Strategic HRM  
BA 5xxx Elective-III  
BA 5xxx Elective-IV

### Second Year

#### Fall Semester

- BA 5308 International Business  
BA 5208 Strategic Finance  
\*BA 5xxx/ Academic Research Project  
(6 Credits)  
BA5xxx Business Research Project  
(6 Credits)

All courses may not be offered every semester. Alternative courses may be substituted as and when required.

\*A student may take either Academic Research Project or Business Research Project.

# FACULTY OF MANAGEMENT SCIENCES

## MBA PROGRAM

*(72 credit hours program for students with a 4-year non-BBA degree)*

For students with 4-year non-BBA degree/16-years of education, the duration of the MBA program is 2 to 2.5-years. Twenty-two courses (66 credits) and Business Research Project (6 credits) OR Academic Research Projects (6 credits) are needed to graduate. Students are also required to complete a 6-week internship and clear the SZABIST comprehensive exam. The maximum duration to complete this degree is 5 years.

### First Year

#### Fall Semester

BA 5301	Financial Accounting
BA 5419	Business Management and Ethics
BA 5418	Managerial Communication
BA 5502	Quantitative Tools for Managers
BA 5404	Marketing Principles
BA 5207	Organizational Behavior

#### Spring Semester

BA 5106	Marketing Management
BA 5205	Human Resource Management
BA 5411	Cost and Management Accounting
BA 5401	Introduction to Business Finance
BA 5408	Business Economics
BA 5501	Applied Research Methods

BA 5104	Strategic Management
BA 5105	Financial Management
BA 5203	Strategic Marketing
BA 5xxx	Elective-I
BA 5xxx	Elective-II

#### Spring Semester

BA 5601	Strategic HRM
BA 5208	Strategic Finance
BA 5xxx	Elective-III
BA 5xxx	Elective-IV
*BA 5xxx	Academic Research Project (6 Credits)
BA 5xxx	Business Research Project (6 Credits)

All courses may not be offered every semester. Alternative courses may be substituted as and when required.

\*A student may take either Academic Research Project or Business Research Project

### Second Year

#### Fall Semester

BA 5308	International Business
---------	------------------------

## MBA PROGRAM

*(90 credit hours program for students with a 2 to 3-year undergraduate degree)*

For students with 2 to 3-year undergraduate degree, the duration of the MBA program is 3 to 3.5 years. Twenty-eight courses (84 credits) and Business Research Project (6 credits) OR Academic Research Projects (6 credits) are needed to graduate. Students are also required to complete a 6-week internship and clear the SZABIST Comprehensive Exam. The maximum duration to complete this degree is 5 years.

### First Year

#### Fall Semester

BA 5317	English Writing Skills
BA 5602	Oral Communication and Presentation Skills

BA 5301	Financial Accounting
BA 5419	Business Management and Ethics
BA 5311	Personal Management

#### Spring Semester

BA 5408	Business Economics
---------	--------------------

# FACULTY OF MANAGEMENT SCIENCES

BA 5404 Marketing Principles  
BA 5418 Managerial Communication  
BA 5305 Statistics and Mathematics for Business  
BA 5401 Introduction to Business Finance

## Second Year

### Fall Semester

BA 5503 Logical and Critical Thinking  
BA 5207 Organizational Behavior  
BA 5405 Statistical Inference  
BA 5105 Financial Management  
BA 5106 Marketing Management

### Spring Semester

BA 5501 Applied Research Methods  
BA 5205 Human Resource Management  
BA 5411 Cost and Management Accounting  
BA 5xxx Elective-I  
BA 5xxx Elective-II

## Third Year

### Fall Semester

BA 5104 Strategic Management  
BA 5208 Strategic Finance  
BA 5406 Entrepreneurship  
BA 5xxx Elective-III  
BA 5xxx Elective IV

### Spring Semester

BA 5203 Strategic Marketing  
BA 5601 Strategic HRM  
BA 5308 International Business  
\*BA 5xxx Academic Research Project  
(6 Credits)  
BA 5xxx Business Research Project  
(6 Credits)

All courses may not be offered every semester.  
Alternative courses may be substituted as and when required.

\*A student may take either Academic Research Project or Business Research Project

## ELECTIVES

### Management

BA 5111 Business Process Re-engineering  
BA 5112 Change Management

BA 5113 Industrial Management and Labor Relations  
BA 5114 Leadership and Motivation Techniques  
BA 5115 Operations Research  
BA 5212 Petroleum Business Management and Risk Analysis  
BA 5213 Project Management  
BA 5214 Supply Chain Management  
BA 5218 Organizational Strategy and Effectiveness  
BA 5238 Organization Development

### Human Resource Management

BA 5113 Industrial Management and Labor Relations  
BA 5114 Leadership and Motivation Techniques  
BA 5117 Performance Appraisal  
BA 5118 Compensation Management  
BA 5128 Leadership Readiness  
BA 5216 Training and Development  
BA 5215 Recruitment and Selection

### Finance

BA 5119 Micro Finance  
BA 5131 Advance Financial Management  
BA 5132 Analysis of Financial Statements  
BA 5133 Corporate Finance  
BA 5134 Derivatives  
BA 5135 Financial Markets and Institutions  
BA 5137 International Banking  
BA 5212 Petroleum Business Management and Risk Analysis  
BA 5231 Islamic Banking and Finance  
BA 5232 Portfolio and Investment Management  
BA 5233 Project Evaluation  
BA 5234 Security Analysis  
BA 5235 Treasury and Funds Management  
BA 5184 Financial Product Regulations  
BA 5284 Theory and Practice of Lending  
BA 5279 Working Capital Management  
BA 5187 Business Analysis and Forecasting  
BA 5138 Econometrics

### Marketing

BA 5121 Advertising  
BA 5122 Brand Management  
BA 5123 Consumer Behavior  
BA 5124 Customer Relationship Management  
BA 5125 Ethics in Marketing  
BA 5126 Export Marketing

# FACULTY OF MANAGEMENT SCIENCES

- BA 5127 Global Marketing
- BA 5129 Services Marketing
- BA 5221 Marketing Research
- BA 5223 Marketing of Financial Services
- BA 5224 Media Planning and Management
- BA 5225 Personal Selling
- BA 5226 Pharmaceutical Marketing
- BA 5227 Sales Management
- BA 5228 Retail Management
- BA 5241 e-Commerce
- BA 5169 Technology Management and Innovation
- BA 5163 Enterprise Resource Planning
- BA 5111 Business Process Re-engineering
- BA 5168 Business Intelligence
- BA 5268 Data Warehousing and Mining

## Supply Chain Management

- BA 5214 Supply Chain Management
- BA 5263 Dynamics of Logistics and Distribution
- BA 5265 Operational Planning in Supply Chain
- BA 5266 Strategic Procurement in SCM

## INTERNSHIP

All MBA students are required to complete a 6-week internship. SZABIST has a separate internship and placement department (EDC) that can help students to find a suitable company for their internship. Completion of the internship is a degree requirement for all MBA programs. Students can produce their current employment record as an alternative to the internship program, provided such employment experience is recognized by SZABIST.

## COMPREHENSIVE EXAMINATION

Students enrolled in the MBA (36 credits) program are not required to take the SZABIST Comprehensive Exam. However, students enrolled in the MBA (72 credits) and MBA (90 credits) programs are required to clear the Comprehensive Exam.

Rules of Comprehensive Exam can be obtained separately from the Examination Department.

## MBA Program (Banking & Finance)

*MBA (36 credit hours program for student with a 4-year BBA degree)*

For students with a 4-year BBA degree, the duration of the MBA (B&F) is 1.5 years. Ten MBA courses (30 credits) and a Business Research Project (6 credits) OR an Academic Research Project (6 Credits) are needed to graduate. Students are also required to complete a 6-week internship. The maximum duration to complete this degree is 5 years.

### First Year

#### Fall Semester

- BA 5501 Applied Research Methods
- BA 5132 Analysis of Financial Statements
- BA 5235 Treasury and Funds Management
- BA 5xxx Elective-I

#### Spring Semester

- BA 5175 Banking Operations
- BA 5273 Prudential Regulations
- BA 5139 Financial Risk Analysis
- BA 5xxx Elective-II

### Second Year

#### Fall Semester

- BA 5xxx Elective-III
- BA 5xxx Elective-IV
- \*BA 5xxx Academic Research Project (6 credits) OR
- BA 5xxx Business Research Project (6 Credits)

All courses may not be offered every semester. Alternative courses may be substituted as and when required.

\*A Student may either take Business Research Project or Academic Research Project.

# FACULTY OF MANAGEMENT SCIENCES

## MBA Program (Banking & Finance)

*MBA (72 credit hours program for students with a 4-year non-BBA degree)*

For students with a 4-year non-BBA degree/professional degree/16-years of education, the duration of the MBA (B&F) program is 2 to 2.5 years. Twenty-two courses (66 credits) and a Business Research Project (6 Credits) OR an Academic Research Project (6 Credits), are needed to graduate. Students are also required to complete a 6-weeks internship and clear the SZABIST Comprehensive Exam. The maximum duration to complete this degree is 5 years.

### First Year

#### Fall Semester

BA 5301	Financial Accounting
BA 5303	Management Principles
BA 5305	Statistics and Mathematics for Business
BA 5403	Management Information Systems
BA 5304	Business and Electronic Communication
BA 5302	Microeconomics

#### Spring Semester

BA 5106	Marketing Management
BA 5104	Strategic Management
BA 5135	Financial Markets and Institutions
BA 5105	Financial Management
BA 5205	Human Resource Management
BA 5402	Macroeconomics

### Second Year

#### Fall Semester

BA 5132	Analysis of Financial Statements
BA 5501	Applied Research Methods
BA 5235	Treasury and Funds Management
BA 5xxx	Elective-I
BA 5xxx	Elective-II
BA 5xxx	Elective-III

#### Spring Semester

BA 5175	Banking Operations
BA 5273	Prudential Regulations
BA 5139	Financial Risk Analysis
BA 5xxx	Elective-IV
*BA 5xxx	Business Research Project (6 credits) OR
BA 5xxx	Academic Research Project (6 Credits)

All courses may not be offered every semester. Alternative courses may be substituted as and when required.

\*A Student may either take Business Research Project or Academic Research Project.

### ELECTIVES

BA 5xxx	Asset Management
BA 5xxx	Banking Crisis and Management
BA 5xxx	Behavioral Finance
BA 5xxx	Capital Markets
BA 5xxx	Commercial Banking
BA 5xxx	Corporate Investment and Banking
BA 5xxx	Corporate Restructuring and Design
BA 5xxx	Financial Intermediations
BA 5xxx	Financial Modeling
BA 5xxx	Financial Planning and Budgeting
BA 5xxx	Marketing of Financial Services
BA 5xxx	Financial Systems
BA 5xxx	Fixed Income Investments
BA 5xxx	Foreign Exchange Operations and Management
BA 5xxx	Banking Insurance
BA 5xxx	Islamic Banking and Finance
BA 5xxx	Information System Audit
BA 5xxx	International Trade and Finance
BA 5xxx	Leasing Strategies and Regulations
BA 5xxx	Mergers and Acquisitions in Banking
BA 5xxx	Options and Derivatives
BA 5xxx	Project Financing
BA 5xxx	Micro and SME Finance
BA 5xxx	Theory and Policy of Modern Finance
BA 5xxx	Venture Capital and Private Equity
BA 5xxx	Working Capital Management

### INTERNSHIP

All MBA (B&F) students are required to complete a 6-week internship. SZABIST has its separate internship and placement department (EDC) that can help students find a suitable company for their internship. Completion of the internship is a degree requirement for all MBA programs. Students can produce their current employment record as an alternative to the internship program, provided such employment experience is recognized by SZABIST.

# FACULTY OF MANAGEMENT SCIENCES

## COMPREHENSIVE EXAMINATION

Students enrolled in the MBA B&F (36 credits) program are not required to take the SZABIST comprehensive exam. However, students enrolled in the MBA B&F

(72 credits) program are required to clear the Comprehensive Exam. Rules of Comprehensive Exam can be obtained separately from the Examination Department.

## Masters in Project Management (MPM)

The Masters in Project Management is designed to enable individuals to manage complex projects of today through modern project management approaches. MPM is a 1-year evening program comprising 33 credit hours spread over three semesters. Eleven courses are required to graduate. The maximum time to complete the degree is 5 years.

### First Year

#### Fall Semester

PM 5102 Fundamentals of Project Management  
PM 5101 Financial Management for Project Management  
PM xxxx Elective-I  
PM 5310 SAP Training\*

#### Spring Semester

PM 5201 Project Scheduling, Planning and Time Management  
PM 5301 Project Quality Management  
PM 5103 Project Cost Management  
PM 5309 Project in Primavera  
PM xxxx Elective-II

\* May alternatively be exchanged with "IT Tools for Project Management" or "Enterprise Project Management".

### Summer Semester

PM 5303 Project Monitoring, Evaluation and Control Management  
PM 5209 Project

### ELECTIVE

PM 5151 Enterprise Resource Planning  
PM 5152 Innovation and Technology Management  
PM 5153 Managing Projects  
PM 5251 Procurement and Contract Management  
PM 5252 Project Change Management  
PM 5253 Project Human Resource Management  
PM 5255 Project Change and Risk Management  
PM 5351 Project Risk Management  
PM 5352 Project Stakeholders Management  
PM 5353 Research Methods for Project Managers

All courses may not be offered every semester. Alternative courses may be substituted as and when required.

## MS Project Management

The students are required to complete 6 courses, 2 Independent Research Studies (IRS), and a thesis, with a total of 30 credit hours. The breakup of 30 credit hours is as follows:

- Four compulsory courses (12 credit hours)
- Two Independent Studies (6 credit hours)
- Two elective courses (6 credit hours)
- Thesis OR two additional elective courses (6 credit hours)

### Fall Semester

MP 5101 Managing Projects  
MP 5103 Research Methodology  
MP 5202 Quantitative Tools for Research  
MP 5203 Operations Research

### Spring Semester

MP 5xxx Elective-I

MP 5xxx Elective-II  
MP 5108 Independent Study-I  
MP 5208 Independent Study-II

### Fall Semester

MP 5xxx Thesis/Elective-III\*  
MP 5xxx Thesis/Elective-IV\*

\* Thesis may be substituted by these electives.

# FACULTY OF MANAGEMENT SCIENCES

## ELECTIVES

MP 5201	Quality Management Tools
MP 5102	Project Management Constraints
MP 5314	Project Review, Assurance and Governance
MP 5324	Risk Management Dynamics
MP 5217	Financial Decision Analysis
MP 5205	Theories of Management
MP 5218	Software Project Management
MP 5317	Supply Chain Management
MP 5325	Project Simulation
MP 5215	Human Resource Management Communication
MP 5318	Business Analysis

Elective courses may vary from time to time. All courses may not necessarily be offered every year. Alternate

courses may be substituted as and when required. Students cannot register in Independent Research Study (IRS) without completion of Research Methods and Quantitative Tools for Research. In addition passing of comprehensive exam would also be required for taking thesis and a comprehensive exam must be passed after completing course work (including IRS), if student decides to substitute thesis with electives.

Maximum course load for a semester is 4 courses (12 credit hours). Summer is not a regular semester, therefore, courses are not offered on a regular basis in summer. However, students can register in one IRS or thesis (3 credits only). Independent Research Study taken in summer will be presented along with Fall semester, in a conference for assessment.

## MS (Project Management) Bridge arrangement

This arrangement allows MPM graduates to enhance their academic qualification. For MPM (30 Credits Program) graduates, a maximum of 5 Courses would be transferred to MSPM program and for MPM (33 Credits Program) graduates, a maximum of six courses can be transferred to MSPM program, subject to passing the courses with a minimum 2.75 grade points, and on surrendering the MPM degree. Project, Project in Primavera and SAP Training are not transferrable towards MSPM degree completion requirements for MPM graduates.

All MSPM candidates are required to pass GAT General with minimum 50% score or GRE score as applicable for MS program as per SZABIST admission policy.

## MS Management Sciences

The students are required to complete 6 courses, 2 Independent Research Studies (IRS), and a thesis, with a total of 30 credit hours. The breakup of 30 credit hours is as follows:

- Three compulsory courses (9 credit hours)
- Two Independent Research Studies (6 credit hours)
- Three elective courses (9 credit hours)
- One Thesis OR two more elective courses (6 credit hours)

### First Year

#### Fall Semester

MS 5137	Research Methods and Techniques
MS 5204	Quantitative Tools for Research
MS 5416	Research Philosophy
MS 5xxx	Elective-I

#### Spring Semester

MS 5xxx	Elective-II
---------	-------------

MS 5xxx	Elective-III
MS 5119	Independent Research Study-I
MS 5219	Independent Research Study-II

### Second Year

#### Fall Semester

MS 5xxx	Elective-IV/Thesis
MS 5xxx	Elective-V/Thesis

# FACULTY OF MANAGEMENT SCIENCES

## COMPULSORY COURSES

- MS 5204 Quantitative Tools for Research
- MS 5137 Research Methods and Techniques
- MS 5416 Research Philosophy

## ELECTIVES

- MS 5101 Change Management
- MS 5102 Organizational Development
- MS 5103 Managerial Economics
- MS 5104 Strategic Marketing Decisions
- MS 5105 Econometrics
- MS 5112 Strategic Management
- MS 5117 Qualitative Tools and Analysis
- MS 5203 Global Corporate Strategy
- MS 5205 International Business Management
- MS 5215 Corporate Finance
- MS 5216 Corporate Governance
- MS 5225 Leadership and Motivation Techniques
- MS 5237 Business Finance and Decision Making
- MS 5238 Strategic Human Resource Development
- MS 5241 Public Administration and Governance
- MS 5301 Seminars in Marketing
- MS 5315 Research Writing

Elective courses may vary from time to time. All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required.

Research Methods & Techniques (RMT), Quantitative Tools for Research (QTR), and Research Philosophy are compulsory courses for MS program. Students cannot register in Independent Research Study (IRS) without completion of these 3 compulsory courses. In addition passing comprehensive exam would also be required for taking thesis.

Maximum course load for a semester is 4 courses (12 credit hours). Summer is not a regular semester, therefore, courses are not offered on a regular basis in summer. However, students can register in one IRS or thesis (3 credits only). Independent Research Studies taken in summer will be presented along with Fall semester in a conference. A student can take maximum two interdisciplinary elective courses in SS/CS/IT/Media/MBA program with the prior approval of their respective program managers.



# FACULTY OF MANAGEMENT SCIENCES

## PhD (Management Sciences)

For completion of PhD degree, students will have to complete a minimum of 54 credit hours. This includes 8 courses (24 credit hours) and one dissertation (30 credit hours). The course work consists of 3 compulsory courses, 3 electives, and 2 independent studies. Maximum course load for a semester is 3 courses (9 credit hours).

Advanced Quantitative Tools for Research (AQTR), Advanced Research Methods & Techniques (ARMT) and Advanced Research Philosophy are pre-requisite courses for Independent Research Study (IRS) and completion of all courses and IRSs along with passing the comprehensive examination are pre-requisite for registering in dissertation.

### First Year

#### Fall Semester

- MS 6106 Advanced Research Methods and Techniques\*
- MS 6216 Advanced Quantitative Tools for Research\*
- MS 6217 Advanced Research Philosophy\*
- MS 6xxx Elective-I

#### Spring Semester

- MS 6xxx Elective-II
- MS 6xxx Elective-III
- MS 6119 Independent Research Study-I
- MS 6219 Independent Research Study-II

### Second Year

#### Fall Semester

- MS 6xxx Dissertation (Proposal)

#### Spring Semester

- MS 6xxx Dissertation

### Third Year

#### Fall Semester

- MS 6xxx Dissertation

#### Spring Semester

- MS 6xxx Dissertation

### COMPULSORY COURSES

- MS 6216 Advanced Quantitative Tools for Research
- MS 6106 Advanced Research Methods and Techniques
- MS 6217 Advanced Research Philosophy

### ELECTIVES

- MS 6201 Change Management
- MS 6211 Organizational Development
- MS 6204 Strategic Marketing Decisions
- MS 6202 Econometrics
- MS 6105 Qualitative Tools and Analysis
- MS 6314 Global Corporate Strategy
- MS 6413 International Business Management
- MS 6311 Corporate Governance
- MS 6111 Business Finance and Decision Making
- MS 6112 Strategic Human Resource Development
- MS 6215 Seminars in Marketing

Elective courses in PhD program are co-offered with MS program. Summer is not a regular semester; however, students can register in only one IRS or Dissertation of 3 credit hours.



# FACULTY OF COMPUTING AND ENGINEERING SCIENCES



## FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS (Computer Science) program is offered by the Department of Computer Science which runs under the Faculty of Computing and Engineering Sciences. The department offers MS & PhD programs in Computer Science as well. The objective of the BS (Computer Science) program is to inculcate a broad-based basic education in Computer Science and its related areas such as Software Engineering, Information Technology and Telecommunications. The students would acquire sufficient fundamental knowledge to adapt quickly to the changes that are occurring and will continue to occur during their professional careers. The program involves analysis, development and implementation of mathematical algorithms to solve computational problems, understanding computer electronics, study of operating systems, languages, compilers, data communication and networks, solving complex computing problems, designing man-to-machine interfaces and so on.

SZABIST believes in conceptual learning. It has developed an organizational network of reputable multinational and national enterprises for collaboration in Computing. SZABIST runs its own software house which facilitates students to meet the desired objectives and learning outcomes.

# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## BS COMPUTER SCIENCE

The program is offered through a well-trained foreign qualified faculty. It consists of 40 courses (five courses per semester) with a total of 130 credit hours. BSCS Program is accredited by NCEAC. The maximum time to complete the degree is 7 years.

### BS (Computer Science) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
First Year					
Fall Semester					
	CSC 1101	Calculus and Analytical Geometry	3,0	3	
	CSC 1102	English Composition and Comprehension	3,0	3	
	CSC 1103	Fundamentals of Programming	3,1	4	
	CSC 1104	Introduction to Computing	2,1	3	
	CSC 1105	Islamiat and Pakistan Studies/Humanities	3,0	3	
			16		
Spring Semester					
	CSC 1201	Discrete Mathematical Structures	3,0	3	
	CSC 1202	Multivariate Calculus	3,0	3	CSC 1101
	CSC 1203	Object Oriented Programming	2,1	3	CSC 1103
	CSC 1204	Physics	3,1	4	
	CSC 1205	Technical and Business Writing	3,0	3	
			16		
Second Year					
Fall Semester					
	CSC 2101	Communication and Presentation Skills	3,0	3	CSC 1102
	CSC 2102	Data Structures and Algorithms	3,1	4	
	CSC 2103	Digital Logic Design	3,1	4	
	CSC 2104	Linear Algebra and Differential Equations	4,0	4	
	CSC 2105	Statistics and Probability	3,0	3	CSC 1101
			18		
		Spring Semester			
	CSC 2201	Computer Organization and Assembly Language	3,0	3	CSC 2103
	CSC 2202	Data Communications and Computer Networks	3,1	4	
	CSC 2203	Database Systems	3,1	4	
	CSC 2204	Finite Automata Theory and Formal Languages	3,0	3	CSC 1201
	CSC 2205	Operating Systems	3,1	4	
			18		
Third Year					
		Fall Semester			
	CSC 3101	Computer Architecture	3,0	3	CSC 2103
	CSC 3102	Human Computer Interaction	3,0	3	
	CSC 3103	Introduction to Software Development	3,1	4	CSC 1203
	CSC 3104	Software Engineering-I	3,1	4	
	CSC 4xxx	University Elective-1	3,0	3	
			17		

# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
Spring Semester					
	CSC 3201	Compiler Construction	3,0	3	CSC 2204
	CSC 3202	Design and Analysis of Algorithms	3,0	3	CSC 2102
	CSC 3203	Numerical Computing	3,0	3	CSC 1101
	CSC 4xxx	CS Elective-1	3,0	3	
	CSC 4xxx	CS Elective-2	3,0	3	
					15
Fourth Year					
Fall Semester					
	CSC 4101	Artificial Intelligence	3,0	3	CSC 2102 CSC 2204
	CSC 4102	Professional Practices	3,0	3	
	CSC 4105	Final Year Project-I	0,3	3	CSC 3103
	CSC 4xxx	CS Elective-3	3,0	3	
	CSC 4xxx	CS Elective-4	3,0	3	
					15
Spring Semester					
	CSC 4205	Final Year Project-II	0,3	3	CSC 4105
	CSC 4xxx	CS Elective-5	3,0	3	
	CSC 4xxx	CS Elective-6	3,0	3	
	CSC 4xxx	CS Elective-7	3,0	3	
	CSC 4xxx	University Elective-2	3,0	3	
				15	



# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## CS ELECTIVES

CSC 4701 Advanced Internet Architecture  
 CSC 4801 Advanced Programming Techniques  
 CSC 4702 Advanced Telecommunication Technologies  
 CSC 4802 Android Application Development  
 CSC 4703 Applied Data Mining  
 CSC 4803 Auditing Information Systems  
 CSC 4704 Bioinformatics  
 CSC 4804 Business Process Re-engineering  
 CSC 4705 Control Systems  
 CSC 4805 Data and Network Security  
 CSC 4706 Digital Image Processing  
 CSC 4806 Digital Signal Processing  
 CSC 4707 DNA Computing  
 CSC 4807 Embedded Programming  
 CSC 4708 Enterprise Resource Planning  
 CSC 4808 Ethical Hacking  
 CSC 4709 Internet Business Models  
 CSC 4809 iOS Development  
 CSC 4712 IT Innovations  
 CSC 4711 Linux Administrator-I  
 CSC 4811 Linux Administrator-II  
 CSC 4713 Managing Data-Center Projects  
 CSC 4812 Mechatronics  
 CSC 4813 Modeling and Simulation  
 CSC 4714 Network Security and Encryption  
 CSC 4715 Oracle Administration-I  
 CSC 4815 Software Engineering-II  
 CSC 4814 Software Project Management  
 CSC 4716 Switching and Routing  
 CSC 4816 Technopreneurship  
 CSC 4717 Web Technologies-I  
 CSC 4817 Web Technologies-II  
 CSC 4718 Wireless and Mobile Technologies

## UNIVERSITY ELECTIVES

Each campus may offer the university electives as per its convenience and availability of resources. The Electives being offered at Karachi Campus as are as follows:

CSC 4501 Business and Technology Ethics  
 CSC 4601 Foreign Languages  
 CSC 4502 Design and Creativity  
 CSC 4602 History of Scientific Ideas  
 CSC 4503 Introduction to Accounting  
 CSC 4603 Management Principles  
 CSC 4504 Organizational Behavior

CSC 4604 Research Report  
 CSC 4505 Systems Administration

## DISTRIBUTION OF CREDIT HOURS

Course Group		Cr. Hrs.	%
<b>Computing</b>	Core Courses	47	36%
	Supporting Areas	12	9%
	General Education	15	12%
<b>Computer Science</b>	Core Courses	18	14%
	Electives	21	16%
	Supporting Courses	11	8%
<b>University Electives</b>		6	5%
<b>Total</b>		<b>130</b>	<b>100%</b>

## Internship

The internship is scheduled for summer at the end of third year. After completion of the six week internship, all students are required to submit a comprehensive report, giving details of their experience and learning.



# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## MS Computer Science

SZABIST offers MSCS degree in three domains: Core Computer Science area and in two specialization tracks, i.e., Software Engineering (SE) and Networks and Security (N&S), in order to cater to the market needs. Students have to complete 3 focused courses in any specific domain.

The program is of 2-year duration and is offered in the evening. It requires 33 credit hours to complete, which consists of 9 courses (27 credit hours) and a Thesis/Research Project (6 credit hours). Although we emphasize and encourage students to undertake Thesis/Research Project, they can take two courses in lieu of the Thesis/Research Project in specific domains.

The maximum time limit to complete the MS degree is 5 years.

## Master of Science in Computer Science (In Core Computer Science)

### First Year

#### First Semester

CSC 5105 Research Methodology  
CSC 5101 Advanced Algorithms Analysis  
CSC 5102 Theory of Computation

#### Second Semester

CSC 5201 Advanced Operating Systems  
CSC 5202 Advanced Computer Architecture  
CSC 5xxx Elective-I (Independent Study-Topic related to CS Streams-I or II)

### Second Year

#### Third Semester

CSC 5xxx Thesis OR Course Work (from CS-Stream-II)  
CSC 5xxx Elective-II (from CS-Stream-I)  
CSC 5xxx Elective-III (from CS-Stream-I)

#### Fourth Semester

CSC 5xxx Thesis OR Course Work (from CS-Stream-II)  
CSC 5xxx Elective-IV (from CS-Stream-I)

## Master of Science in Computer Science (With Specialization in Software Engineering)

### First Year

#### First Semester

CSC 5105 Research Methodology  
CSC 5101 Advanced Algorithms Analysis  
CSC 5102 Theory of Computation

#### Second Semester

CSC 5201 Advanced Operating Systems  
CSC 5202 Advanced Computer Architecture  
SEC 5xxx Elective-I (Independent Study-Topic related to SE Streams I or II)

### Second Year

#### Third Semester

CSC/SEC 5xxx Thesis OR Course Work (from CS Stream-II or from SE-Stream-II)  
SEC 5xxx Elective-II (from SE-Stream-I)  
SEC 5xxx Elective-III (from SE-Stream-I)

#### Fourth Semester

CSC/SEC 5xxx Thesis OR Course Work (from CS Stream II or from SE-Stream-II)  
SEC 5xxx Elective-IV (from SE-Stream-I)

# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## Master of Science in Computer Science (With Specialization in Networks & Security)

### First Year

#### First Semester

CSC 5105 Research Methodology  
CSC 5101 Advanced Algorithms Analysis  
CSC 5102 Theory of Computation

#### Second Semester

CSC 5201 Advanced Operating Systems  
CSC 5202 Advanced Computer Architecture  
NSC 5xxx Elective-I (Independent Study-Topic related to N&S Streams-I or II)

### Second Year

#### Third Semester

CSC/NSC 5xxx Thesis OR Course Work  
(from CS Stream-II or  
from N&S-Stream-II)  
NSC 5xxx Elective-II (from N&S-Stream-I)  
NSC 5xxx Elective-III (from N&S-Stream-I)

#### Fourth Semester

CSC/NSC 5xxx Thesis OR Course Work  
(from CS Stream II or  
from N&S-Stream-II)  
NSC 5xxx Elective-IV (from N&S-Stream-I)

### CS-Stream-I

CSC 5xxx Real-Time Systems  
CSC 5xxx Digital Image Processing  
CSC 5xxx Machine Learning  
CSC 5xxx Data Mining

### CS-Stream-II

CSC 5xxx Reverse Engineering  
CSC 5xxx Digital Forensics and Malware Analysis  
CSC 5xxx Advanced Resource Sharing Architecture  
CSC 5xxx Computer Vision  
CSC 5xxx Robotics  
CSC 5xxx Advanced Database Design  
CSC 5xxx Distributed Computing  
CSC 5xxx Systems and Network Programming

### SE-Stream-I

SEC 5xxx Software Requirement Engineering  
SEC 5xxx Software System Architecture

SEC 5xxx Software System Quality  
SEC 5xxx Advanced Software Engineering

### SE-Stream-II

SEC 5xxx Software Analysis and Testing  
SEC 5xxx Web Engineering  
SEC 5xxx Software Project Management

### N&S-Stream-I

NSC 5xxx Advanced Computer Networks  
NSC 5xxx Network Security  
NSC 5xxx Applied Cryptography  
NSC 5xxx Information Security

### N&S-Stream-II

NSC 5xxx Telecom Policies and Regulations  
NSC 5xxx Mobile Ad-hoc Networks  
NSC 5xxx Advanced Data Communications

#### Pre-Requisites:

- For any advanced course, its basic course or pre-requisite course must have been done before.
- For each track, the following courses must have been done prior to admission:

### MS (CS) (In Core Computer Science)

Artificial Intelligence  
Finite Automata Theory  
Digital Logic Design

### MS (CS) with SE-Specialization

Artificial Intelligence  
Finite Automata Theory  
Digital Logic Design  
Software Engineering-I

### MS (CS) with N&S-Specialization

Data Communication and Computer Networks  
Finite Automata Theory  
Digital Logic Design

Full time academic load is three courses. All students are required to register for full load in the first semester.

# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## PhD (Computing)

The PhD program requires students to complete 48 credit hours. Course work of 18 credits (6 courses) is needed which includes core courses, electives and independent study. Dissertation of 30 credits is also required to complete. The maximum time limit to complete the PhD degree is 7 years.

### First Year

#### Fall Semester

CSC 6101 Research Methodology  
CSC 6xxx Elective-I  
CSC 6xxx Elective-II

#### Spring Semester

CSC 6xxx Independent Study  
CSC 6xxx Elective-III  
CSC 6xxx Elective-IV

### Second Year

#### Fall Semester

CSC 6xxx Dissertation

#### Spring Semester

CSC 6xxx Dissertation

### Third Year

#### Fall Semester

CSC 6xxx Dissertation

#### Spring Semester

CSC 6xxx Dissertation

**Elective courses are listed under the MS Computer Science program.**

Followed by successful completion of the course work, Comprehensive Examination is required to pass to acquire PhD Candidacy, after which research period starts. The entire research work is carried out under the supervision of the PhD supervisor, which is assigned and approved as per the university procedure. The complete research work is required to be submitted in the form of a "Dissertation", after a minimum period of two years.

PhD course work credits may be implemented via selection of a particular mode of course execution (as recommended by the respective Graduate

Committee/Program Manager) from the various available approaches, including guided/taught courses, seminars, and independent research studies.



# FACULTY OF COMPUTING AND ENGINEERING SCIENCES



## FACULTY OF COMPUTING AND ENGINEERING SCIENCES

### Department of Mechatronic Engineering

#### Mechatronic Engineering

Mechatronics is a multidisciplinary field of engineering. It refers to the efficient and effective integration of mechanical systems and electronics. A mechatronic engineer unites the principles of mechanics, electronics and computing to generate a simpler, economical, reliable, and versatile system. Examples of mechatronic systems include aircraft, motor vehicles, automated manufacturing plants, robots of all types, medical and surgical devices and many others.

#### Mechatronics at SZABIST

The department offers a program that includes various engineering science courses from the relevant fields in addition to a strong foundation in basic sciences and mathematics. In order to ensure that this academic program at SZABIST conforms to standards of internationally recognized universities, the curriculum has been designed with the guidance of academics and professionals specializing in Mechatronic. The program has been accredited by Pakistan Engineering Council. The program has received 7 stars (Highest Ranking) by the Chartered of Inspection & Evaluation Committee, Sindh.

# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## Program Objectives

The objectives of the program are to provide a broad and basic education in multiple disciplines comprised of Mechanical, Electronics, and Computer Engineering to ensure that students in the program are exposed to a wide spectrum of engineering knowledge and practice. Upon completion of their degree, the Bachelor of Engineering (Mechatronics) graduates will be able to:

- Understand the interdisciplinary fundamentals of mechanical engineering, electronics engineering, control systems, computer engineering, and their integration.
- Successfully identify problems, design, and optimize integrated solutions by focusing on modern Mechatronic engineering practices.
- Innovate, develop, and adopt new directions in their advance education.
- Demonstrate professional interaction; communicate effectively with team members, and work efficiently on multidisciplinary projects.

## BE Mechatronic Engineering Program

### First Year

#### Fall Semester

- ME 1101 Communication and Presentation Skills (2, 0)  
ME 1102 Electric Circuits (3, 1)  
ME 1109 Engineering Drawing-I (0, 2)  
ME 1104 Engineering Mathematics-I: Calculus and Analytical Geometry (3, 0)  
ME 1108 Introduction to Computer System and Programming (1, 1)  
ME 1203 Engineering Physics (2, 1)

#### Spring Semester

- ME 1201 Electronic Devices and Circuits (3, 1)  
ME 1202 Engineering Mathematics-II: Linear Algebra and ODEs (3, 0)  
ME 1106 Islamic Studies (2, 0)  
ME 1204 Engineering Statics (3, 0)  
ME 2301 Computer Programming (2, 1)  
ME 1207 Engineering Workshop (0, 2)

### Second Year

#### Fall Semester

- ME 2307 Data Structures and Object Oriented Programming (2, 1)  
ME 2302 Digital Logic Design (2, 1)  
ME 2303 Engineering Dynamics (3, 0)  
ME 2304 Engineering Mathematics-III: 3D Geometry and Vector Calculus (3, 0)  
ME 2305 Network Analysis (3, 0)  
ME 2306 Pakistan Studies (2, 0)  
ME 2309 Engineering Drawing-II (0, 1)

#### Spring Semester

- ME 2401 Electronics Circuit Design (3, 1)  
ME 2402 Electro-Mechanical Systems (3, 1)  
ME 2403 Engineering Mathematics-IV: Transformation Techniques (3, 0)  
ME 2406 Strength of Materials (3, 1)  
ME 2405 Thermodynamics (2, 1)

# FACULTY OF COMPUTING AND ENGINEERING SCIENCES

## Third Year

### Fall Semester

- ME 3501 Engineering Mathematics–V:  
Numerical Methods (3, 0)
- ME 3502 Fluid Mechanics (3, 1)
- ME 3503 Microprocessor and Microcontroller  
Based Systems (2, 1)
- ME 3504 Sensors, Actuators and  
Instrumentation (3, 1)
- ME 3506 Materials and Manufacturing  
Processes (3, 0)
- ME 3507 Theory of Machines (2, 1)

### Spring Semester

- ME 3602 Control Systems (3, 1)
- ME 3603 Engineering Mathematics–VI:  
Probability and Statistics (3, 0)
- ME 3605 Power Electronics (3, 1)
- ME 3606 Machine Design and CAD/CAM (3, 1)
- ME4705 Mechatronics System Design (3, 1)
- ME 1205 Technical Writing Skills (2, 0)

## Fourth Year

### Fall Semester

- ME 4xxx Elective-I (Engineering) (3, 0)
- ME 4702 Engineering Economics and  
Project Management (3, 0)
- ME 4802 Robotics (3, 1)
- ME 4704 Mechanical Vibrations (3, 0)
- ME 4708 Final Year Project\* (0, 3)

### Spring Semester

- ME 4801 Industrial Automation (2, 1)
- ME 4xxx Elective-II (Engineering) (3, 0)
- ME 4xxx Elective-III (Management Sciences) (3, 0)
- ME 4703 Heat Transfer (2, 1)
- ME 4808 Final Year Project (0, 3)

### Electives

#### Engineering Electives

- ME 4722 Digital Signal Processing
- ME 4723 Simulation and Modeling
- ME 4821 Digital Image Processing
- ME 4822 Introduction to Bio-Medical Engineering

- ME 4721 Artificial Intelligence and  
Computer Vision

### Management Sciences Electives

- ME 4823 Engineering Management
- ME 4724 Entrepreneurship
- ME 4825 Research Methodology
- ME 4725 Leadership and Motivation Techniques
- ME 4824 Organizational Behavior

Elective courses are offered subject to the availability of the required expertise & resources.

Full-time academic load during first semester is six courses. All students are required to register for full load in the first semester.

### Internship

The internship is scheduled for summer at the end of the third year. After the completion of the 6-week internship, all students are required to submit a comprehensive report, giving details of their experience and learning.

\*To be continued and graded at the conclusion of 8th Semester.



# FACULTY OF SOCIAL SCIENCES



## FACULTY OF SOCIAL SCIENCES

SZABIST prepares students for managerial careers in Social Sciences. SZABIST offers course work in many disciplines to provide potential managers with an understanding of the complexities of the professional world in which they will operate and of the organizations of which they will become a part.

The course work at SZABIST is an intensive study of a host of disciplines, and offers majors in Psychology, Sociology, International Relations, Economics, Sindh Studies, and Media Studies.

# FACULTY OF SOCIAL SCIENCES

## Department of Social Sciences

### BS Social Sciences

To obtain a BS degree in Social Sciences, the students are required to complete a total of 144 credit hours within 7 years. The degree consists of a total of 46 courses and a Research Project.

#### First Year

##### Fall Semester

- SS 1117 Computer and Web Skills
- SS 1116 English-I: English for General Purposes
- SS 1109 Islamiat /Ethics and Pakistan Studies
- SS 1105 Microeconomics
- SS 1115 Community Services
- SS 1201 Introduction to Social Sciences

##### Spring Semester

- SS 2306 Psychology
- SS 1205 Macroeconomics
- SS 2307 Sociology
- SS 1155 Introduction to Political Science
- SS 2412 International Relations
- SS 4705 Sindh Studies

#### Second Year

##### Fall Semester

- SS 2314 Study of Anthropology
- SS 2316 English-II: English for Academic Purposes
- SS 2313 Introduction to Social Psychology
- SS 2318 Mathematics and Statistics
- SS 2413 Philosophy
- SS 1xxx Elective-I

##### Spring Semester

- SS 2406 Gender Studies
- SS 2418 Statistical Inferences
- SS 2414 Introduction to Organizational Psychology
- SS 2411 Environmental Studies
- SS 1209 Social Policy
- SS 1xxx Elective-II

#### Third Year

##### Fall Semester

- SS 2312 Culture, Art and Society
- SS 3509 Language-I
- SS 3606 Political Economy
- SS 4xxx Major-I
- SS 4xxx Major-II
- SS 4xxx Major-III

##### Spring Semester

- SS 3504 Research Methods
- SS 3605 International Law and Human Rights
- SS 3609 Language-II
- SS 4xxx Major-IV
- SS 4xxx Major-V
- SS 4xxx Major-VI

#### Fourth Year

##### Fall Semester

- SS 3503 Development Studies
- SS 4707 Introduction to Health Psychology
- SS 4709 Research Project-I
- SS 4xxx Major-VII
- SS 4xxx Major-VIII
- SS 4xxx Major-IX

##### Spring Semester

- SS 4804 Public Policy
- SS 4809 Research Project-II
- SS 2405 Enlightenment
- SS 4xxx Major-X
- SS 4xxx Major-XI
- SS 4xxx Major-XII

##### ELECTIVES

- SS 1154 Literature
- SS 2305 Human Geography
- SS 1157 Comparative Religion

# FACULTY OF SOCIAL SCIENCES

SS 1254 World History  
SS 1262 Mass Media  
SS 1163 Development and Politics  
SS 1263 Culture & Media in Sindh

## MAJORS

### PSYCHOLOGY

SS 4111 Abnormal Psychology  
SS 4112 Developmental Psychology  
SS 4134 Cognitive Psychology  
SS 4135 Educational Psychology  
SS 4234 Psychodynamics  
SS 4268 History of Psychology  
SS 4167 Child Psychology  
SS 4156 Clinical Psychology  
SS 4114 Personality Theories  
SS 4255 Counseling and Psychotherapy  
SS 4211 Psychological Testing  
SS 4236 Positive Psychology  
SS 4168 Experimental Psychology  
SS 4267 Forensic Psychology  
SS 4262 Physiological Psychology

### SOCIOLOGY

SS 4269 Civil Society  
SS 4271 Peace Movements  
SS 4138 Corporate Social Responsibility  
SS 4141 Mass Media and Society  
SS 4237 Post-Colonial State and Social Development  
SS 4238 Social Entrepreneurship  
SS 4239 Social Justice  
SS 4241 Sociology of Education  
SS 4242 The Sociology of Poverty  
SS 4196 Social Theories-I  
SS 4296 Social Theories-II  
SS 4171 Class, Caste, and Ethnicity in South Asia  
SS 4172 Political Sociology  
SS 4272 Social Change in Pakistan  
SS 4169 Citizenship  
SS 4273 Urbanization  
SS 4295 Criminology

### INTERNATIONAL RELATIONS

SS 4275 Foreign Policy and International Politics

SS 4274 Diplomacy, Conflict Resolution and Confidence Building Measures  
SS 4219 Peace Research  
SS 4222 Strategic Studies  
SS 4176 Globalization and Global Governance  
SS 4277 Modern Ideologies  
SS 4174 Central and West Asian Studies  
SS 4175 European Studies  
SS 4177 Middle Eastern Studies  
SS 4179 Politics of Terrorism  
SS 4178 Muslim World  
SS 4276 International Institutions  
SS 4278 Political Geography  
SS 4119 Arms Control and Disarmament  
SS 4279 US and International Politics

### ECONOMICS

SS 4139 Gender and Development  
SS 4147 Development and Planning  
SS 4181 Capabilities and Human Development  
SS 4281 Fiscal and Monetary Economics  
SS 4261 Mathematical Economics  
SS 4183 Industrial Economics  
SS 4284 Trade Economics  
SS 4128 Agriculture Economics  
SS 4182 Game Theory  
SS 4283 Labour Economics  
SS 4282 Growth  
SS 4184 Poverty and Inequality  
SS 4228 History of Economic Thought  
SS 4249 Pakistan Economy  
SS 4251 Sustainable Development

### SINDH STUDIES

SS 4188 Geography and Geology of Sindh  
SS 4287 History and Politics of Sindh  
SS 4288 Irrigation System of Sindh  
SS 4185 Agriculture in Sindh  
SS 4285 Archaeology of Sindh  
SS 4186 Anthropology and Culture of Sindh  
SS 4286 Art and Architecture in Sindh  
SS 4187 Ethnomusicology of Sindh  
SS 4289 Sindh's Economy and Commerce  
SS 4292 Survey of Sindhi Literature  
SS 4189 Philosophy of Sindh  
SS 4192 Sindh's Sociology-I:

# FACULTY OF SOCIAL SCIENCES

	Education and Language Policy
SS 4193	Sindh's Sociology-II: Social Structures and Development
SS 4194	Sindh's Sociology-III: Health, Gender, and Feminism
SS 4293	The Sindhi Diaspora
SS 4291	Sindh's Geopolitical Exigencies
SS 4191	Sindh's Botanical and Zoological Heritage

All courses may not necessarily be offered every year. Alternate courses may be substituted as and

when required.

Full time academic load is six courses. All students are required to register for full load in the first semester.

## INTERNSHIP

The internship is scheduled for summer at the end of the third year. After the completion of the 6-week internship, all students are required to submit a comprehensive report, giving details of their experience and learning.

## MS Social Sciences

Students are required to complete 6 courses, 2 Independent Research Studies (IRs), and a thesis/2 additional courses instead of thesis, with a minimum of 30 credit hours. The break-up of 30 credit hours is as follows:

- 2 Compulsory Courses\*
- 2 Independent Research Studies (IRs)
- 4 Electives
- Thesis/2 additional courses instead of thesis

## First Year

### Fall Semester

SS 5121	Advanced Research Methods and Techniques-I (Qualitative)
SS 5122	Advanced Research Methods and Techniques-II (Quantitative)
SS 5xxx	Elective-I
SS 5xxx	Elective-II

### Spring Semester

SS 5116	Econometrics
SS 5119	Independent Research Study-I
SS 5xxx	Elective-III
SS 5xxx	Elective-IV

### Summer Semester

SS 5219	Independent Research Study-II
---------	-------------------------------

## Second Year

### Fall Semester

SS 5xxx	Thesis/2 additional courses instead of Thesis
---------	---

## ELECTIVES

SS 5326	Research Philosophy
SS 5223	Financial Time Series
SS 5227	Research Writing
SS 5104	Politics of Geo-Economics
SS 5111	Democratization as a Global Process
SS 5212	NGO Management
SS 5214	Public Policy Management
SS 5305	Political Economy of Pakistan
SS 5306	Sacred and Secular
SS 5311	Environmental Studies
SS 5312	Globalization and Developing Countries
SS 5313	Intellectual Property Rights and Laws
SS 5322	Topics of Political Economy
SS 5226	Issues in Pakistan's Political and Constitutional History
SS 5321	History of Ideas
SS 5228	Corporate Governance
SS 5206	Political Economy in the Global Perspective
SS 5402	Law and Human Rights

\*ARMT-I and ARMT-II are mandatory for all.

# FACULTY OF SOCIAL SCIENCES

## PhD Social Sciences

Students are required to complete a total of 48 credit hours with 4 courses, 2 Independent Research Studies (IRS) and a dissertation. The following is the break-up of the 48-credit hour courses

- 2 Compulsory Courses\* (6 credit hours)
- 2-3 Core/Elective (6-9 credit hours)
- 2 Independent Research Studies (6 credit hours)
- 1 Thesis (30 credit hours)

## First Year

### Fall Semester

- SS 6104 Advanced Research Methods and Techniques- I (Qualitative)  
 SS 6105 Advanced Research Methods and Techniques- II (Quantitative)  
 SS 5xxx Elective-I

### Spring Semester

- SS 6119 Independent Research Study-I  
 SS 6219 Independent Research Study-II  
 SS 5xxx Elective-II

### Summer Semester

- SS 6x09 Dissertation

- SS 5206 Political Economy in the Global Perspective  
 SS 5402 Law and Human Rights

Two interdisciplinary courses can be allowed with the approval of both the Program Managers subject to the relevance of courses. Elective courses may vary from time to time.

\*ARMT-I and ARMT-II are mandatory for all except for SZABIST continuing students.

## Second Year

### Fall Semester

- SS 6x09 Dissertation

### Spring Semester

- SS 6x09 Dissertation

## ELECTIVES

- SS 5104 Politics of Geo-Economics  
 SS 5111 Democratization as a Global Process  
 SS 5212 NGO Management  
 SS 5214 Public Policy Management  
 SS 5305 Political Economy of Pakistan  
 SS 5306 Sacred and Secular  
 SS 5311 Environmental Studies  
 SS 5312 Globalization and Developing Countries  
 SS 5313 Intellectual Property Rights and Laws  
 SS 5228 Corporate Governance



# FACULTY OF SOCIAL SCIENCES

## FACULTY OF SOCIAL SCIENCES

### Department of Media Sciences

In the 21<sup>st</sup> century, media in their myriad forms, print, TV, radio, film, video, digital, virtual, and mobile have increasingly saturated all aspects of contemporary life. This proliferation of media presents vast opportunities and poses immense challenges. Our degree programs in Media Sciences are designed to help undergraduate and graduate students participate productively, both as practitioners and scholars, in this exciting and challenging environment.

Broadly defined, the Media Sciences constitute a field of study that encompasses the history, theory, production, content, and public effects of a variety of media, including but not limited to journalism, advertising, photography, radio, film, video, television, design, the internet, digital technologies, and the performing arts. We recognize that studying media requires interdisciplinary thinking. Therefore, by bridging theory and practice and using an interdisciplinary approach we give our students the skills, knowledge, and flexibility that the increasingly competitive international and national market demands.

The Department of Media Sciences at SZABIST offers the following undergraduate and graduate degree programs:

- Bachelor of Media Science  
(Film & TV Production, Advertising Strategy & Design, and Journalism)
- Master of Advertising
- MS Media Studies

### Bachelor of Media Science

The Department of Media Sciences at SZABIST offers a comprehensive 4-year Bachelor of Media Science degree with majors in Film and Television Production, Advertising Strategy & Design, and Journalism. To earn an undergraduate degree, students must enroll in and successfully complete a total of 135 credit hours, which include 43 courses, a 6-credit thesis, and an internship. Forty-three courses include: 33 core courses, 7 major requirements in Film and Television Production, or Advertising Strategy & Design, or Journalism, and 3 open electives. All students must complete their degree within 7 years.

#### First Year

##### Fall Semester

MD 1122 English for General Purposes (EGP)  
MD 1107 Drawing and Perspective  
MD 1115 Introduction to Media Industries  
MD 1116 Civilization Studies-I  
MD 2402 Islamiyat and Pakistan Studies/Humanities  
MD 3601 Art of Music

##### Spring Semester

MD 1222 English for Academic Purposes  
MD 1104 Culture, Media, and Society  
MD 1106 Photography  
MD 1119 Play Analysis

MD 1216 Civilization Studies-II  
MD 2323 Production Practices-I

#### Second Year

##### Fall Semester

MD 1211 Basic Design  
MD 1217 Introduction to Sound  
MD 2321 History and Aesthetics of Film  
MD 2325 Media Research  
MD 2313 Idea Development  
MD 2423 Theater Project

##### Spring Semester

MD 1118 Topics in Asian Literature

# FACULTY OF SOCIAL SCIENCES

MD 2318 History of Commercial Art  
MD 2425 Audiovisual Editing  
MD 2427 Design Practices-I  
MD 3523 Production Practices-II  
MD 3505 Principles of Journalism

## Third Year

### Fall Semester

MD 1213 Creative Writing  
MD 2424 Media Psychology  
MD 3518 Animation and Motion Graphics  
MD 3527 Design Practices-II  
MD 3511 Radio Channel Project-I  
MD 4714 Producing Short Narratives

### Spring Semester

MD 2405 Media Laws and Ethics  
MD 4xxx Major-I  
MD 4xxx Major-II  
MD 4xxx Major-III  
MD 4xxx Major-IV  
MD 4xxx Elective-I

## Fourth Year

### Fall Semester

MD 4701 State and Nation Building in Pakistan  
MD 4xxx Major-V  
MD 4xxx Major-VI  
MD 4xxx Major-VII  
MD 4xxx Elective-II

### Spring Semester

MD 3506 Theories of Visual Culture  
MD 4807 Thesis-I  
MD 4xxx Elective-III

### Summer Semester

MD 4808 Thesis-II

## MAJORS

### Film & Television Production

MD 4765 Basic Lighting  
MD 4726 Directing-I  
MD 4825 Screenwriting

MD 4821 Cinematography  
MD 4764 Production Design  
MD 4724 Documentary Vision  
MD 4868 Production Practices-III

### Advertising Strategy & Design

MD 4736 Integrated Marketing Communication  
MD 4739 Advertising Design and Concept  
MD 4755 Brand Identity Management  
MD 4782 Interaction Design  
MD 4837 Media Planning  
MD 4846 New Media Advertising  
MD 4847 Copywriting

### Journalism

MD 4757 Feature Writing-I  
MD 4759 Editing, Subediting, and Design  
MD 4783 TV Journalism  
MD 4839 Reporting the News  
MD 4859 Introduction to Photojournalism  
MD 4864 Investigative Journalism and  
Crisis Reporting  
MD 4879 Multimedia Journalism

## ELECTIVES

MD 4732 Typography  
MD 4786 Directing for Actors  
MD 4854 Illustration  
MD 4862 Advanced Studio Project  
MD 4877 The International Newsroom  
MD 4882 Audio Podcasting  
MD 4867 Topics in Film and Television  
MD 4886 Game Design  
MD 4xxx Culture & Media in Sindh

Certain film and video production courses may require additional fees for equipment rental, film purchases, and travel. The Department of Media Sciences will make every effort to subsidize these costs in order to minimize their financial impact on students.

Students enrolled full time are required to take at least 5 courses each semester. Students unable to enroll full time should consult the Head of Department and the Program Manager to discuss any accommodation they might need. All first semester students are required

# FACULTY OF SOCIAL SCIENCES

to register for 6 courses. In order to register for thesis credits in the final semester, students must have completed a minimum of 38 courses. Students on academic probation will not be allowed to register for thesis credits.

## INTERNSHIP

The Department of Media Sciences requires all students to complete a 6-week internship at an organization of

their choice by the end of their third year. Upon completion of the internship, students must submit a comprehensive summary of what they learned following their internship.

All students are also required to work within the department to organize department's annual media festival in the third year of their degree.

## Master of Advertising

The Department of Media Sciences at SZABIST offers an evening Master's degree program in Advertising providing students a comprehensive training through courses that prepares them to engage in various career options in the advertising industry. To be awarded a Master of Advertising degree, students need to complete a total of 36 credit hours, which includes 10 courses and a 6-credit research project. All students must complete their degree within 5 years.

### First Year

#### Fall Semester

MD 5207 Media Evolution and Innovation  
MD 5161 Integrated Marketing Communications  
MD 5141 Idea Development  
MD 5162 Advertising and Marketing Research

#### Spring Semester

MD 5102 Media and Contemporary Culture  
MD 5262 Brand Management

MD 5264 Copywriting and Advertising  
Conceptualization  
MD 5265 Digital Advertising

#### Summer Semester

MD 5165 Digital Media Content  
MD 5351 Campaign Strategy

### Second Year

#### Fall Semester

MD 5349 Research Project

## MS Media Studies

The Department of Media Sciences at SZABIST offers a 2-year evening MS degree program in Media Studies designed to prepare students for scholarly research and teaching roles. To be awarded an MS in Media Studies, students need to complete a total of 30 credit hours, which includes 8 courses and 6 credits of research or thesis. All students must complete their degree within five years.

Students who successfully complete their MS degree may apply for the PhD program in the Department of Social Sciences. Students accepted into the PhD program will need to complete a doctoral dissertation within three years of enrollment and to fulfill all requirements, including necessary course work and research as outlined by the Department of Social Sciences and required by the Higher Education Commission of Pakistan.

### First Year

#### Fall Semester

MD 5102 Media and Contemporary Culture  
MD 5207 Media Evolution and Innovation  
MD 5104 Research Methodology

#### Spring Semester

MD 5212 Theories of Visual Culture  
MD 5112 Media and Post-Colonialism  
MD 5201 Communication for Social Change

# FACULTY OF SOCIAL SCIENCES

## Second Year

### Fall Semester

MD5xxx Elective-I  
MD 5xxx Elective-II  
MD 5109 Thesis-I

### Spring Semester

MD 5209 Thesis-II

## ELECTIVES

MD 5xxx Media, Politics, and Governance  
MD 5xxx Issues in International Media  
MD 5xxx Theories of Communication Design  
MD 5xxx Theories of Film and Television  
MD 5xxx Urban Geographies and Visual Cultures  
MD 5xxx Media, Art, and Technology



# FACULTY OF EDUCATION



## FACULTY OF EDUCATION

The Faculty of Education at SZABIST is committed to improve the quality of education in Pakistan by preparing its students for leadership roles in the field of education as situated in a fast-changing global world, without losing sight of the local context. The emphasis of the intensive programs offered is on fostering a critical awareness about educational issues, the sociopolitics of educational policies, curricular and pedagogical decisions and teacher education/faculty development problems. This is achieved through interactive and intensive courses and rigorous research-based assignments and practicum.

## Program

The Educational Leadership and Management Programs at the Faculty of Education are designed to meet national and international standards of educational study and research. They are in conformity with the HEC guidelines and caters to the interests of a diverse set of learners who have chosen Education to be their field of study. The programs prepare them for practical leadership roles with sound theoretical standing to take informed decisions.

# FACULTY OF EDUCATION

## MS Educational Leadership and Management

The MS in Educational Leadership and Management is a 1.5 year program spread over three semesters. It is a 30 credit hour program with 6 Courses, 2 Independent Research Studies (3 credit hours each) and a Thesis (6 credit hours).

The students will have the opportunity to specialize in the fields of: Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, and Technology.

The breakup of 30 credit hours is as follows:

- Four compulsory courses (12 credit hours)
- Two elective courses (6 credit hours)
- Two Independent Research Studies (6 credit hours)
- Thesis or 2 elective courses (6 credit hours)

### First Year

#### Fall Semester

ELM 5101	Leadership and Management in Educational Contexts
ELM 5102	Advanced Research Methods and Techniques-I (Qualitative)
ELM 5103	Advanced Research Methods and Techniques-II (Quantitative)
ELM 5xxx	Elective-I

#### Spring Semester

ELM 5201	Curriculum Development and Planning
ELM 5xxx	Elective-II
ELM 5108	Independent Research Study-I
ELM 5208	Independent Research Study-II

### Second Year

#### Fall Semester

ELM 5xxx	Thesis/Elective-III & Elective-IV (6 credits)
----------	---

#### COMPULSORY COURSES

ELM 5101	Leadership and Management in Educational Contexts
ELM 5201	Curriculum Development and Planning
ELM 5102	Advanced Research Methods and Techniques-I (Qualitative)
ELM 5103	Advanced Research Methods and Techniques-II (Quantitative)

#### ELECTIVES

ELM 5xxx	Sociological Issues in Education/ Access/Outcomes and Quality
ELM 5xxx	Learning Effectiveness in Higher Education Contexts
ELM 5xxx	Use of Technology in Education
ELM 5xxx	Education in the Context of Conflict
ELM 5xxx	Socio-Politics of Language Policy in Educational Contexts
ELM 5xxx	Leading Change for Transformative Education
ELM 5xxx	Educational Policy Reform: Comparative Perspectives
ELM 5xxx	Performance Management and Professional Development
ELM 5xxx	School Evaluation and Monitoring
ELM 5xxx	Teacher Education
ELM 5xxx	Research Philosophy
ELM 5xxx	Testing, Assessment and Evaluation
ELM 5xxx	Finance and Resource Management
ELM 5xxx	Organizational Development

All students will have to appear in a comprehensive examination towards the end of the program.

#### INTERNSHIP

All MS students are required to complete a 6-week internship. SZABIST has its separate internship and placement department, the Executive Development Center (EDC), that can help students find a suitable place for their internship.

# FACULTY OF EDUCATION

## PhD Educational Leadership and Management

The PhD in Educational Leadership and Management program at the Faculty of Education aspires to meet the growing demand of leaders and managers with expertise in the field of education. There is a strong emphasis on research, and critical awareness on issues of social justice and equity in educational contexts. It equips graduates with the knowledge and skills to have impact on educational policy, reform, and practice.

The PhD in Educational Leadership and Management is a 3 year program, spread over six semesters. It is a 48 credit hour program comprising 5 courses, 1 Independent Research Study (3 credit hours), and a Dissertation (30 credit hours).

The students will have the opportunity to specialize in the fields of: Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, and Technology.

### First Year

#### Fall Semester

- ELM 6101 Advanced Research Methods and Techniques-I (Qualitative)  
ELM 6102 Advanced Research Methods and Techniques-II (Quantitative)  
ELM 6xxx Elective-I

#### Spring Semester

- ELM 6xxx Elective-II  
ELM 6xxx Elective-III  
ELM 6108 Independent Research Study-I

### Second Year

#### Fall Semester

- ELM 6xxx Dissertation (Proposal)

#### Spring Semester

- ELM 6xxx Dissertation

### Third Year

#### Fall Semester

- ELM 6xxx Dissertation

#### Spring Semester

- ELM 6xxx Dissertation

#### COMPULSORY COURSES\*

- ELM 6101 Advanced Research Methods and Techniques-I (Qualitative)

- ELM 6102 Advanced Research Methods and Techniques-II (Quantitative)

#### ELECTIVES

- ELM 6xxx Sociological Issues in Education/ Access/Outcomes and Quality  
ELM 6xxx Learning Effectiveness in Higher Education Contexts  
ELM 6xxx Use of Technology in Education  
ELM 6xxx Education in the Context of Conflict  
ELM 6xxx Socio-Politics of Language Policy in Educational Contexts  
ELM 6xxx Leading Change for Transformative Education  
ELM 6xxx Educational Policy Reform: Comparative Perspectives  
ELM 6xxx Performance Management and Professional Development  
ELM 6xxx School Evaluation and Monitoring  
ELM 6xxx Teacher Education  
ELM 6xxx Research Philosophy  
ELM 6xxx Testing, Assessment and Evaluation  
ELM 6xxx Finance and Resource Management  
ELM 6xxx Organizational Development

All the students have to appear in Comprehensive Examination at the end of their course work.

\*The research courses are compulsory for all the students except for SZABIST continuing students who will take two elective courses instead.

# FACULTY OF BIOSCIENCES



## FACULTY OF BIOSCIENCES

SZABIST's Biosciences programs are designed to give students a sound and broad academic base for a professional and rewarding career in biological and health care fields. It blends theoretical and practical knowledge, critical thinking and real life experience to equip students with marketable skills and offers the opportunity to study a broad range of disciplines in biological and medical sciences.

## PROGRAM & FACULTY

Biosciences programs aim to produce professionals with firm knowledge of fundamental concepts of Biology and their current applications. The BS, MS, and MPH programs intend to provide training in the fundamentals of ever-changing fields of healthcare, agriculture, pharmaceuticals, molecular and biochemical sciences.

Upon completion, students will have a broad knowledge of biological sciences and other related discipline with high level of understanding and appreciation in certain specialized areas, including cell and tissue culture techniques, genetic manipulations, drug design and therapeutics, molecular biology, advanced analytical techniques, and public health care sector.

Biosciences faculty includes professionals with relevant expertise and experience in both research and teaching. The faculty is heavily engaged in their research projects and also provides quality supervision to the students at SZABIST Center for Biosciences Research (SCBR) laboratories.

# FACULTY OF BIOSCIENCES

## Lab Facilities

SZABIST is equipped with hi-tech and state-of-the-art scientific laboratories that conduct research, which is at par with international standards. The labs include:

- Sterile rooms for tissue culture
- General Biochemistry and Microbiology labs
- Molecular biology labs
- Green-net house facility
- Enzyme Isolation & purification lab

## Job Placement Possibilities

- Food Industry
- Biochemical Industry
- Biotechnology Companies
- Healthcare Sector (Public Health)
- Diagnostic Labs and Hospital
- Pharmaceutical Industry
- Bioinformatics Software Houses
- Research Centers
- Academia

## BS Biosciences

BS Biosciences at SZABIST is a four-year program spread over eight semesters and consists of 138 credit hours of teaching, 45 courses, an internship of at least six weeks, and a research project. The maximum time limit to complete the BS degree is 7 years.

### First Year

#### Fall Semester

- BIO 2301 Biochemistry-I
- BIO 1111 English for general purposes
- BIO 1107 Fundamental Mathematics
- BIO 1209 Introduction to Microbiology
- BIO 1206 Physiology-I

#### Spring Semester

- BIO 1207 Advanced Microbiology
- BIO 2401 Biochemistry-II
- BIO 1211 English for academic purposes
- BIO 3504 Immunology
- BIO 1208 Statistics
- BIO 2305 Physiology-II

### Second Year

#### Fall Semester

- BIO 1101 Cell Biology
- BIO 2309 Animal and Plant Tissue Culture
- BIO 2405 Hematology
- BIO 1104 Introduction to Computing
- BIO 2303 Islamiat and Pakistan Studies/Humanities
- BIO 2404 Lab Management

#### Spring Semester

- BIO 2406 Genetic Engineering
- BIO 3502 Endocrinology

- BIO 4803 Molecular Biology
- BIO 3604 Neurochemistry
- BIO 2306 Psychology
- BIO 2411 English for professional purposes

### Third Year

#### Fall Semester

- BIO 2402 Bioinformatics
- BIO 2302 Biotechnology
- BIO 3509 Epidemiology
- BIO 3503 Genetics
- BIO 3505 Pharmacology-I

#### Spring Semester

- BIO 4801 Bioethics
- BIO 3606 Advanced Biotechnology
- BIO 2403 Environmental Science
- BIO 2304 Nutrition and Dietetics
- BIO 3605 Pharmacology-II
- BIO 4xxx Elective-I

### Fourth Year

#### Fall Semester

- BIO 3602 Human Anatomy
- BIO 4702 Introduction to Pathology
- BIO 4703 Research Methodology
- BIO 4xxx Elective-II
- BIO 4xxx Elective-III

# FACULTY OF BIOSCIENCES

## Spring Semester

BIO 3601 Agricultural Science  
BIO 4802 Biophysics  
BIO 4701 Business Management  
BIO 4804 Research Report  
BIO 4704 Toxicology  
BIO 4xxx Elective-IV

## Electives

### Molecular Biology:

BIO 4721 Advanced Biochemical Techniques  
BIO 4722 Medical Transcription  
BIO 4723 Virology

BIO 4822 Nanotechnology  
BIO 4725 Advanced Molecular Techniques  
BIO 4726 Applied Enzymology  
BIO 4827 Systems Biology

### Biotechnology:

BIO 4721 Advanced Biochemical Techniques  
BIO 4724 Telemedicine  
BIO 4823 Stem Cell Research  
BIO 4727 Food Biotechnology  
BIO 4825 Fermentation Biotechnology  
BIO 4726 Applied Enzymology  
BIO 4826 Medical Biotechnology

## Master in Public Health (MPH)

MPH at SZABIST is a two-year program spread over four semesters and consists of 60 credit hours of teaching. The curriculum includes 22 courses, 16 of 3 credit hours each, 3 of 2 credit hours, an internship of at least six weeks, and a research project (Thesis) of 6 credit hours. The maximum time limit to complete the MPH degree is 5 years.

## First Year

### Fall Semester

MPH 5101 Environmental & Occupational Health  
MPH 5102 Epidemiology  
MPH 5103 Foundation of Public Health  
MPH 5104 Social and Behavioral Sciences  
MPH 5105 Statistical Reasoning in Public Health

### Spring Semester

MPH 5201 Chronic Non Communicable Diseases  
MPH 5202 Health Services Administration  
MPH 5203 Infectious Diseases  
MPH 5204 Nutrition and Health  
MPH 5205 Research Methodology

## Second Year

### Fall Semester

MPH 5301 Demography  
MPH 5302 Health promotion  
MPH 5303 Medical Ethics  
MPH 5304 Medical Genetics  
MPH 5305 Medicine and Law  
MPH 5306 Maternal and Child Health

### Spring Semester

MPH 5401 Health Policy  
MPH 5402 International Health  
MPH 5403 PPP and NGO Management  
MPH 5409 Thesis



# FACULTY OF BIOSCIENCES

## MS Biosciences

MS Biosciences at SZABIST is a two-year program spread over four semesters and consists of 30 credit hours of teaching. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours. Students can also take two additional courses in lieu of Thesis in order to complete the total credit hours. The maximum time limit to complete the MS degree is 5 years.

### First Year

#### Fall Semester

- BIO 5101 Advanced Research Methodology
- BIO 5102 Biostatistics

#### Spring Semester

- BIO 5201 Molecular Genetics
- BIO 5202 Techniques in Biomolecules Analyses

### Second Year

#### Fall Semester

- BIO 5xxx Elective-I
- BIO 5xxx Elective-II
- BIO 5xxx Thesis or Elective-V

#### Spring Semester

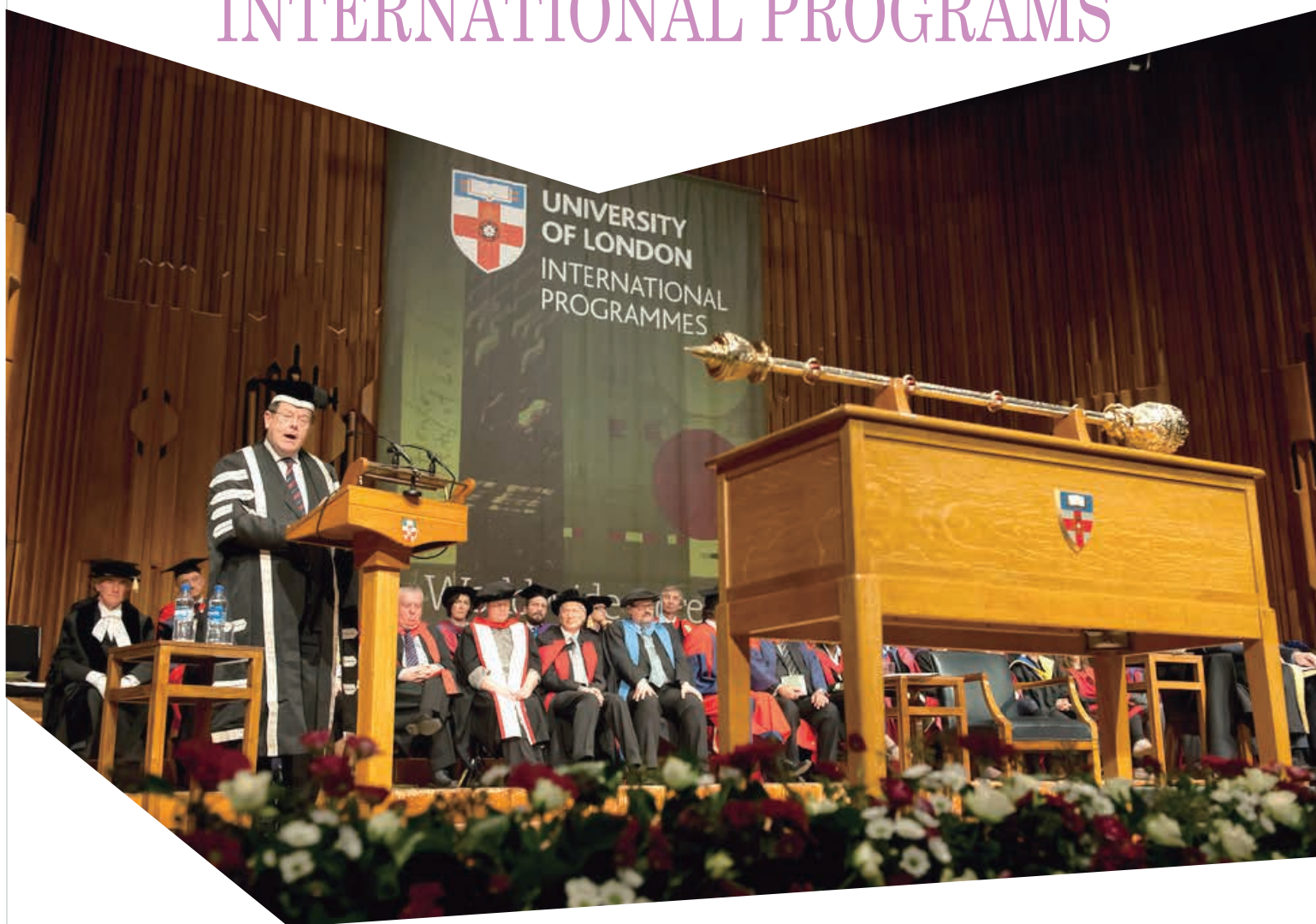
- BIO 5xxx Elective-III
- BIO 5xxx Elective-IV
- BIO 5xxx Thesis or Elective VI

#### Electives

- BIO 5xxx Applied Biotechnology
- BIO 5xxx Environmental and Industrial Biotechnology
- BIO 5xxx Plant Biotechnology
- BIO 5xxx Fermentation Design and Engineering
- BIO 5xxx Medical Biotechnology
- BIO 5xxx Biocatalysis and Enzymology
- BIO 5xxx Clinical Biochemistry
- BIO 5xxx Drug Discovery and Development
- BIO 5xxx Biocomputation
- BIO 5xxx Cancer Biology
- BIO 5xxx Applied Immunology
- BIO 5xxx Techniques in Diagnostics
- BIO 5xxx Molecular Dynamics
- BIO 5xxx Food Sampling Techniques and Analysis
- BIO 5xxx Food Quality Management System
- BIO 5xxx Food Toxicology and Adulteration



# INTERNATIONAL PROGRAMS



## INTERNATIONAL PROGRAMS

### LLB

The University of London International LLB Programme is an evening programme which can be completed in three years. The LLB degree awarded by University of London, UK through the International Programme has the same academic standard as a degree awarded to a student studying at the University of London. The main syllabus has been set and the course outlines are designed by the University of London.

### BA (Hons) BUSINESS STUDIES (BABS)

SZABIST offers a 3-year BA (Hons) Business Studies (BABS) degree from the University of South Wales, UK. Students will complete two years of study at SZABIST and proceed ahead to complete the third year at the University of South Wales, and earn an international degree.

# INTERNATIONAL PROGRAMS

## LLB

### Entrance Requirements

To be eligible to register for the LLB, a student must normally be at least 17 years of age at the time of registration and have passes in:

- Either two subjects at GCE A level, and at least three further subjects at GCSE or GCE O level (at not less than grade C)

Or

Three subjects at GCE A level (with one A Level at not less than grade D)

Or

Three subjects at GCE A level, and one further subject at GCSE or GCE O Level (at not less than grade C)

Or

Two subjects at GCE A Level, and two further subjects at AS Level.

*Overlapping subjects in O Levels and in A Levels will not be counted.*

- Bachelors degree (in any discipline) awarded by an institution acceptable to the University of London.
- A 4-year bachelor degree (in any discipline) awarded by an institution acceptable to University of London may register for LLB degree under the Graduate Entry Route. Students who register via this route are only required to complete 9 courses (instead of 12) for the LLB degree.

**Tests of proficiency in English (provided this has been awarded within the past 3 years)**

- International General Certificate of Secondary Education (IGCSE): English as a Second Language passed at grade C or above.
- International English Language Testing System (IELTS) when an overall score of at least 6 is achieved with a minimum of 5.5 in each sub-test.

## CURRICULUM

Upon completion of the following curriculum at SZABIST, students may apply to become a member of any prestigious Inns of Court, UK, or be eligible for admission to the LLM programme.



# INTERNATIONAL PROGRAMS

## First Year

Criminal Law  
Public Law  
Common Law Reasoning and Institutions  
Elements of the Law of Contract

## Second Year/Third Year

Law of Trusts  
Law of Tort  
Land Law  
Jurisprudence and Legal Theory  
Law skills portfolio (pathway 1 or pathway 2)  
EU Law

### Plus any three subjects from:

Introduction to Islamic Law  
Company Law  
Commercial Law  
Protection of Human Rights  
Family Law  
Public International Law



UNIVERSITY  
OF LONDON  
INTERNATIONAL PROGRAMMES | REGISTERED  
CENTRE

## International LLB Programme

# INTERNATIONAL PROGRAMS

## BA (Hons) Business Studies (BABS)

### Admission Requirements

The candidate must have completed A Level (minimum 3 passes)/Intermediate (minimum 50% marks) or equivalent from a recognized institution.

### First Semester

- BA 1101 Introduction to Accounting
- BA 1102 Microeconomics
- BA 1103 Introduction to Computers
- BA 1104 Personal Management
- BA 1105 English Writing Skills
- BA 1204 Maths for Business

### Second Semester

- BA 1201 Financial Accounting
- BA 1202 Macroeconomics
- BA 1203 Management Principles
- BA 1206 Oral Communication and Presentation Skills
- BA 2305 Statistics and Mathematics for Business
- BA 3604 Computer Programming for Managers

### Third Semester

- BA 2301 Introduction to Business Finance
- BA 2302 Graphic Design in Multimedia Presentations
- BA 2404 Calculus

### Fourth Semester

- BA 2303 Marketing Principles
- BA 2304 Managerial Accounting
- BA 2306 Social Sciences
- BA 2403 Business Ethics
- BA 3504 Organizational Behavior
- BA 3605 Statistical Inference

### Fifth Semester

- BA 3505 Quantitative Skills
- BA 3601 Financial Management
- BA 3602 Marketing Management
- BA 4704 Management Information Systems
- BA 4721 Advertising
- BA 4801 Law and Taxation

All courses may not be offered every year. Alternate courses may be substituted as and when required.

### Third year at the University of South Wales

Customer Service Excellence  
Strategic Management  
Law for Managers  
European Business Environment



# ACADEMIC CALENDAR 2015-16 (Karachi Campus)

## ACADEMIC CALENDAR 2015-16 (Karachi Campus)

### FALL 2015

WEEK	COMMENTS
1	Registration for Courses
2	IS Thesis Advisors Meeting
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	Mid-Term Exam for Undergraduate Students
8	Mid-Term Exam for Graduate Students
9	
10	
11	Last Week to Withdraw from Courses
12	
14	
15	
16	Final Exams
17	
Aug 08, 2015	New Faculty Meeting /Orientation
Aug 12, 2015	IS Thesis Advisors Meeting
Dec 12, 2015	Independent Study Presentations for MS/PhD students
Dec 26, 2015	Comprehensive Exam

### Classes commencing date

Classes will commence on August 03, 2015 at Karachi, Hyderabad and Larkana Campuses.

# ACADEMIC CALENDAR 2015-16 (Karachi Campus)

## ACADEMIC CALENDAR 2015-16 (Karachi Campus)

### SPRING 2016

WEEK	COMMENTS
1	Registration for Courses
2	
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	Mid-Term Exam for Undergraduate Students
8	Mid-Term Exam for Graduate Students
9	
10	
11	Last Week to Withdraw from Courses
12	
13	
14	
15	
16	Final Exams
17	
Jan 09, 2016	New Faculty Meeting /Orientation
May 14, 2016	Independent Study Presentations for MS/PhD students
May 28, 2016	Comprehensive Exam

### Classes commencing date

Classes will commence on January 04, 2016 at Karachi, Hyderabad and Larkana Campuses.

# PROGRAMS OFFERING (FALL 2015) AT SZABIST

## PROGRAMS OFFERING (FALL 2015) AT SZABIST

PROGRAMS	CAMPUS				
	Karachi	Islamabad	Larkana	Hyderabad	Dubai
Bachelor of Business Administration (BBA)	√	√	√	√	√
BA (Hons.) in Business Studies (BABS)	√				
BS Accounting & Finance		√			
BS Computer Science	√	√	√	√	√
Bachelor of Media Science	√	√			√
BS Social Science	√	√			
BE Mechatronic Engineering	√				
BS Bioscience	√				
Bachelor of Law (LLB)	√				
Master in Business Administration (MBA)	√	√	√	√	√
Executive MBA	√	√			√
Masters in Project Management	√	√			√
Professional MBA		√			
MBA Banking & Finance	√				
Masters in Human Resource Management		√			
Master of Advertising	√				
Master in Public Health (MPH)	√				
MS Biosciences	√				
MS Computer Science	√	√			√
MS(CS) with specialization in Software Engineering	√	√			√
MS(CS) with specialization in Networks & Security	√	√			√
MS Media Studies	√				
MS Management Science	√	√			
MS Developmental Studies		√			
MS Social Sciences	√	√			
MS Educational Leadership and Management	√				
MS Project Management	√	√			
PhD in Computer Science	√	√			
PhD in Social Sciences	√				
PhD in Management Sciences	√	√			
PhD Educational Leadership and Management	√				

### Disclaimer

This prospectus is only informational and should not be taken as binding on the Institute. The Institute; therefore, reserves the right to change any rule, regulation, and guideline applicable to the program and the student whenever it is deemed appropriate or necessary, and it will be binding on all continuing and new students for all programs at all campuses.

**We just Don't Work Hard  
We Work Smart**





### **SZABIST Karachi Campus**

90 and 100 Clifton, Karachi 75600

Phone: (92-21) 111-922-478, (92-21) 35823433 (Ext:147-148-104)

Email: [info@szabist.edu.pk](mailto:info@szabist.edu.pk). [www.szabist.edu.pk](http://www.szabist.edu.pk). [www.facebook.com/szabistofficial](https://www.facebook.com/szabistofficial)



### **SZABIST Islamabad Campus**

Street # 09, Plot # 67 Sector H-8/4, Islamabad, Pakistan

Phone: 051-4863363-65, Fax: 051-4863367

Email: [info@szabist-isb.edu.pk](mailto:info@szabist-isb.edu.pk)



### **SZABIST Larkana Campus**

Sachal Colony, Larkana, Sindh, Pakistan

Phone : (92-74) 4053400-3, Fax: (92-74) 4044760

Email: [info@lrk.szabist.edu.pk](mailto:info@lrk.szabist.edu.pk)



### **SZABIST Hyderabad Campus**

Ground, 3rd & 4th floor, State Life Building, Thandi Sarak, Hyderabad

Phone # 022-2782442-43, Fax # 022-2782444

Email: [info@hyd.szabist.edu.pk](mailto:info@hyd.szabist.edu.pk)



### **SZABIST Dubai Campus**

6th Floor, Block-10, Dubai International Academic City, Dubai, U.A.E

Phone: +971 4 3664601, Fax: +971 4 3664607

Email: [info@szabist.ac.ae](mailto:info@szabist.ac.ae), [www.szabist.ac.ae](http://www.szabist.ac.ae)