





PROSPECTUS 2018

Shaheed Zulfikar Ali Bhutto Institute of Science & Technology



We just Don't Work Hard We Work Smart



SHAHEED ZULFIKAR ALI BHUTTO INSTITUTE OF SCIENCE & TECHNOLOGY

THE VISION

SZABIST aims to be a globally recognized institute for excellence in education, research, development, and distinction in service.

THE MISSION

SZABIST is committed to produce highly qualified professionals to:

- Meet national and global contemporary needs;
- Conduct cutting edge research and development;
- Provide hi-tech scientific and technological expertise;
- Meet current and future socio-economic challenges;
- Meet global citizenship responsibility.

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FACULTY OF MANAGEMENT SCIENCES

Bachelor of Business Administration (BBA) BS Accounting & Finance (BS A&F) Bachelor of Arts in Business Studies (BABS) BS Entrepreneurship (BSE) Executive Master of Business Administration (EMBA) Master of Business Administration (MBA) Master of Business Administration in Banking & Finance (MBA B&F) Master of Project Management (MPM) MS Project Management (MS PM) MS Management Science (MS MS) PhD Management Science (PhD MS)

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DEPARTMENT OF EDUCATION

B.Ed (1.5 Years) Secondary MA Education (MA Edu) MS Educational Leadership and Management (MS ELM) PhD Educational Leadership and Management (PhD ELM)

FACULTY OF MEDIA SCIENCES

BS Media Science (BS MS) Master of Advertising (MoA) MS Media Studies (MS MD)

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BS Biosciences (BS Bio) BS Biotechnology (BS Biotech) MS Public Health (MS PH) MS Biosciences (MS Bio) PhD Biosciences (PhD Bio)

INTERNATIONAL PROGRAMS

Bachelor of Law (LLB) - University of London, UK BA (Hons) in Business Studies - Coventry University, UK

ACADEMIC CALENDAR 2018-19

Fall 2018 Spring 2019

CAMPUS WISE PROGRAMS OFFERING

Programs Offering at Different Campuses of SZABIST

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 the Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), one of the most prestigious higher education institutions of Pakistan.

At SZABIST, we believe that innovative thoughts and high ideals teach the values of hard work and diligence. We prepare our students for professional careers, therefore, we offer a wide variety of humanities, science and technological programs including Management Sciences, Computer Sciences, Social Sciences, Media Sciences, Mechatronics Engineering, Biosciences, Education, Public Health and Law. The curriculum of each traditional and emerging program is approved by the Higher Education Commission (HEC), Pakistan

and is taught by highly qualified and competent faculty members.

To achieve the mission of our founding Chancellor Shaheed Mohtarma Benazir Bhutto i.e. providing opportunity for high quality tertiary education and research to the youth in different areas of Pakistan, SZABIST, now has four campuses in Pakistan-Karachi, Islamabad, Larkana and Hyderabad, and an overseas campus in Dubai, UAE.

At SZABIST, you will become part of a community that believes research is an integral part of academic excellence. We encourage participation in research and extra-curricular activities enabling you to realize and nurture your true intellectual and professional potential.

SZABIST also offers numerous scholarships and financial assistance to make education accessible and affordable for all of its students. In order to augment student's learning experience and continuously improve the standard of education, the Institutional Research Department/Quality Enhancement Cell periodically assesses all programs to monitor and enhance the quality of education being imparted.

SZABIST is investing considerable resources for renovation and upgradation of its infrastructure and acquisition of additional physical facilities for its campus. A "Library Hub" is being established to fulfill emerging research and academic requirements.

As I welcome the new students, I encourage them to strive for excellence, develop freedom of thought and speech, and while they equip themselves with marketable skills, they should actively work to free our beloved country from bigotry and ignorance.

The motto of SZABIST is to provide students the opportunity to experience university life in a way that helps them to discover themselves whilst focusing on their professional goals. So I wish you success in your years at SZABIST.

Dr. Azra Fazal Pechuho Chancellor SZABIST

PRESIDENT'S MESSAGE



It is my pleasure to welcome prospective students to Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), a tertiary education institute known for its high quality and broad range of undergraduate and postgraduate programs and premium learning environment. SZABIST believes in encouraging students to discover their talent and strengths, and achieve their educational, professional, and personal aspirations.

Over the past 21 years, SZABIST's national and international market reputation has been significantly enhanced. This is evident from the increased enrollment of about 11,000 students in its five campuses-Karachi, Larkana, Hyderabad, Islamabad, and Dubai (UAE).

SZABIST, guided by the vision of its Founding Chancellor, Shaheed Mohtarma Benazir Bhutto, is today a leading higher education institution for the youth of Pakistan aspiring for a high quality, relevant education. Our diversified academic portfolio offers a range of courses in 8 Bachelors, 13 Masters and 4 Doctoral level programs in the field of Management, Computing, Social Sciences, Media, Engineering, Biosciences, Public Health, Education and Law. This prospectus provides you with comprehensive information about our programs. The Institute, in compliance with the requirements of Higher Education Commission, has developed curricula which not only relates to prevailing market demand but also prepares students with the knowledge and skills for the future needs of Pakistan's growing economy.

We are proud of our competent faculty and professionals who teach according to rigorous academic standards, evolving market requirements and provide a supportive environment for personal development. In addition to a wide spectrum of disciplines as presented in this Prospectus, SZABIST also offers exciting opportunities for co-curricular activities. Our Student societies organize debates, drama, sports competitions, guest speaker sessions, workshops, and build networks with the Alumni and renowned companies for assistance in job placements.

Moreover, at 94% SZABIST has one of the highest ranking Quality Enhancement Cells (QECs) amongst Pakistani universities. Quality assurance measures are rigorously applied through tools such as Program Self-Assessment Reports, feedback of relevant stakeholders, publications and fulfilling documentary requirements of the regulatory authorities.

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 President SZABIST

VICE PRESIDENT'S (ACADEMICS) MESSAGE



Welcome and thank you for your interest in SZABIST, which is a recognized degree awarding institution and enjoys a high reputation within academia. The founding mission of this institution was to provide a high-quality education to students of great promise, and today we remain resolute in our obligation. As you visit our website, you will discover an institution committed to preparing students in diversfied areas of learning, such as Management Sciences, Computer Science, Media Sciences, Biosciences, Education & Social Sciences, Mechatronic Engineering and Law. SZABIST programs under each department are in compliance with HEC recommended course plans and are accredited by respective regulatory bodies such as NBEAC, NCEAC, PEC and CIEC.

Our students, called SZABISTIANS, feel pride belonging to a community of professionals. Our strength is our ERP implemented through our own software house ZABSOLUTIONS. We utilize modern IT tools in teaching and managing all our academics and campus activities to ensure efficient working environment. We follow all prescribed quality education standards through ongoing and systematic assessments round the year. We have been continuously getting more than 90% score during the last five years by QEC/HEC.

We do not merely believe on traditional classroom studies but go beyond by providing numerous opportunities to our students to engage them in various co-curricular and extra-curricular activities. We strongly believe in developing their personalities which we ensure through conducting seminars and guest lectures frequently by eminent personalities through our student societies.

The learning outcomes of the programs have been carefully designed to compel the students for critical & creative thinking, to acquire problem-solving skills and to professionally handle all pedagogical tools. We are fully aware that a University without Research is like a "Body" without "Soul"; therefore, we give high priority to all types of research activities.

Being an academician, I know the significance of providing "Counseling" to the students at every step in their academic career which helps in setting their directions as I believe "Direction" is more important than "Speed".

Finally, I welcome you once again and wish you success. Selecting SZABIST as your career-building institution, I assure you that you will be groomed and nurtured for meeting your future career challenges after completion of your academic degree program.

Prof. Dr. M. Altaf Mukati Vice President (Academics) SZABIST

VICE PRESIDENT ADMINISTRATION & FINANCE MESSAGE



Welcome to Shaheed Zulfikar Ali Bhutto Institute of Science and Technology. Here you will be provided an academically and professionally rewarding experience which will help build your character and personality.

Established on the vision of Shaheed Zulfikar Ali Bhutto, the Prime Minister of Pakistan and brought into reality by his daughter, the Prime Minister of Pakistan, 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.

We look forward in journeying with you through our highly qualified faculty and state-of-the-art facilities conducive to learning & development, an exciting period where you will enjoy excellence in the respectful and caring environment of SZABIST.

With Best Wishes

Ms. Nasreen Haque Vice President (Administration & Finance) SZABIST

INTRODUCTION

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) is highly ranked and 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 set by HEC and other regulatory bodies, for example, National Business Education Accreditation Council (NBEAC), National Computing Education Accreditation Council (NCEAC), National Accreditation Council for Teacher Education (NACTE), Pakistan Engineering Council (PEC) and Knowledge Human and Development Authority (KHDA) Dubai, United Arab Emirates (UAE).

SZABIST is nurturing the intellect of more than 11, 000 enrolled students through its five campuses located in Karachi, Hyderabad, Larkana, Islamabad and Dubai. Also, up till now, degrees have been awarded to almost 14,500 graduates. In addition, the employability of the SZABIST's alumni is not only restricted to key positions at National organizations, but also at International organizations, place them at distinguished positions.

SZABIST offers undergraduate, graduate and post graduate degrees in six diversified disciplines including: Management Sciences, Computer Sciences, Media Sciences, Education & Social Sciences, Mechatronic Engineering and Biosciences. Also, SZABIST in collaboration with University of London, UK offers LLB as an external program, and in affiliation with Coventry University, UK offers BABS as a top-up program.

SZABIST is ranked as one of the most reputed university by HEC and Chartered Inspection and Evaluation Committee (CIEC). SZABIST Business School has been rated as "Outstanding" by CIEC and HEC, Pakistan. In addition, all the relevant programs are accredited and recognized by NBEAC, NCEAC, NACTE, PEC, and KHDA Dubai. Since 2012, the SZABIST-QEC has been awarded more than 91% in the quantitative assessment by Quality Assurance Agency (QAA) HEC, Pakistan.

The Institute has signed MoUs with various reputable and distinguished organizations and institutions such as, Istanbul Medipol University, Turkey; University of London, UK; Association of Chartered Certified Accountants (ACCA), British Council, and Cisco Networking Academy.

SZABIST Karachi Campus is situated in the prime location of the city i.e. Clifton Block 5, units 79, 90, 100, 153,154, 172 and 173. Also, plans are underway for the construction of a purpose-built campus for Management Sciences, Computer Science, Education & Social Sciences, Media Sciences, Mechatronic Engineering, and Biosciences departments. Moreover, the construction of a permanent engineering campus, "School of Engineering in Applied Sciences" is Underway, spread, over 300 acres of land at Gharo (about 30 km away from the Karachi Airport).

SZABIST is proud to offer education par excellence in the fields that are crucial for Pakistan's socioeconomic development.



DEGREES OFFERED

All programs are not offered at all campuses. Students are required to check with the local campus offering of programs or refer last page of the prospectus.

Bachelor of Business Administration (BBA)

SZABIST offers a four-year (eight semesters) BBA degree program of 144 credit hours. This is SZABIST's flagship program. For the BBA program, the students are required to complete 46 courses and 6 credit hours Research Project. The program includes 42 compulsory courses and 4 elective courses from Management, Marketing, Finance, IT or Supply Chain Management. To obtain the BBA degree, students have to complete 144 credit hours and six-week internship. The maximum time limit to complete the BBA degree is six years.

Bachelor of Science in Accounting & Finance (BS A&F)

SZABIST offers a four-year (eight semesters) Bachelor of Science (Accounting & Finance) program, consisting of 46 Courses (six courses per semester) and a 6 credit hours Research Project. Students have to complete 144 credits hours along with six weeks of internship to obtain the BS Accounting & Finance (BS A & F) degree . The maximum time limit to complete the degree program is six years. Those who complete BS (A&F) from SZABIST will get an exemption in ACCA papers from F1 to F9.

Bachelor of Arts (Hons) in Business Studies

SZABIST offers a three-year BA (Hons) degree in Business Studies from the Coventry University UK. Students who complete two years at SZABIST will proceed to complete the third year from Coventry University UK and earn an International degree. Students can also complete BABS degree at SZABIST by opting for 3rd & 4th year of BABS program.

Bachelor of Science in Entrepreneurship (BSE)

SZABIST offers a four-year (eight semesters) BS Entrepreneurship degree program of 144 credit hours. For the BS in Entrepreneurship program, the students are required to complete 45 courses and 9 credit hours of Capstone Projects. The courses include 41 compulsory courses and 4 electives. To obtain the BS Entrepreneurship degree, students have to complete 144 credit hours and 2 apprenticeships. Maximum time limit to complete the BS in Entrepreneurship (BSE) degree is six years.

Bachelor of Science in Computer Science (BS CS)

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 8 technical electives and 4 university electives. These 8 technical electives provide intensive learning in the diversified areas of computer science and allied disciplines. Internship opportunities are provided to complete degree requirement. The maximum time limit to complete the degree program is six years.

Bachelor of Engineering in Mechatronic Engineering (BE ME)

SZABIST offers a four-year (eight semesters) BE Mechatronic Engineering degree program, which is accredited by Pakistan Engineering Council (PEC). This program has received 7-Stars i.e., World Class rating by Chartered Inspection & Evaluation Committee (CIEC) Sindh. SZABIST is a pioneer university to offer this program at undergraduate level in the province of Sindh. The program is essentially a day program and consists of 46 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-ME degree program is six years.

Bachelor of Science in Media Science

The Faculty of Media Sciences at SZABIST offers a comprehensive 4-year Bachelor of Science in Media Science degree program 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 in Film and Television production, or Advertising Strategy & Design, or Journalism and 3 open electives). All students must complete their degree within six years.



Bachelor of Science in Social Sciences (BS SS)

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) including research project with a total of 144 credit hours. The maximum time limit to complete the BS degree is six years.

Bachelor of Science in Biosciences (BS Bio)

BS Biosciences at SZABIST is a four-year program spread over eight semesters and consists of 135 credit hours of teaching (43 courses), an internship of at least six weeks, and a 6 credit hours research project. The maximum time limit to complete the BS degree is six years.

Bachelor of Science in Biotechnology (BS Biotech)

BS Biotechnology at SZABIST is a four-year program spread over eight semesters and consists of 135 credit hours of teaching, 43 courses, an internship of at least six weeks, and a research project. The maximum time limit to complete the BS degree is six years.

Bachelor of Education 1.5 Years (Secondary)

B.Ed (Secondary) is a 1.5 years degree program offered to pre-service and in-service teachers. This program is offered to facilitate those students who want to get enrolled in MS/ MPhil (Education) in future. It is a 54 credit hours program with 12 core courses (3 credit hours each), 4 content specialized courses (3 credit hours each), 3 credit hours teaching practice and 3 credit hours research project. The maximum time limit to complete the B.Ed degree is four years.

Executive Master of Business Administration (EMBA)

SZABIST offers a two-year EMBA degree program for executives and middle level managers striving 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 four semesters and consists of 66 credit hours. Twenty courses, one Business Project (3 credits hour) and one Research Project (3 credits) are required to graduate. Maximum time limit to complete the EMBA degree is four years.

Masters of Business Administration (MBA)

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

SZABIST offers both MBA Day and Evening programs with specialization in Management, Human Resource Management, 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 four years.

The Chartered Institute of Logistics and Transport (CILT) Certification

The Chartered Institute of logistics & Transport (CILT) is the leading professional body associated with logistics and transport, having over 33,000 members in over 100 countries worldwide. SZABIST Karachi has signed Memorandum of Understanding (MOU) with CILT. Now MBA students have the opportunity of opting for The Chartered Institute of Logistics and Transport (CILT) Certification by doing three electives:(1) Business Theory (2) Business Application (3) Supply Chain Operations. There is a certification fee to be paid by students.

MBA (36 credit-hour program)

This program is tailored for students with a four-year BBA/Equivalent business degree. The minimum duration to complete the program is 1.5 years. The program comprises 10 courses (30 credit hours) and Business Research Project (6 credit hours) OR Academic Research Project (6 credit hours) OR Thesis (6 credit hours). Students are also required to complete a six weeks internship to fulfill degree requirements. The maximum duration to complete MBA is four years.

MBA (72 credit-hour program)

This program is designed for students having a four-year non-business bachelor degree (e.g. BS-CS, BE etc.) or 16 years of education in different disciplines. The duration to complete this program is 2.5 years. Twenty-two courses (66 credit hours) and Business Research Project (6 credit hours) OR Academic Research Project (6 credit hours) OR Thesis (6 credit hours) are required to complete the program. Students are also required to undertake a six week duration of internship during summer. The maximum duration to complete the program is four years.

MBA in Banking & Finance (36 credit-hour program)

This program is developed for students with a four-year BBA, BABS or BS (A&F) degree. The duration of the MBA (B&F) is 1.5 years. Ten MBA courses (30 credit hours), a Business Research Project (6 credit hours) OR an Academic Research Project (6 credit hours) OR Thesis (6 credit hours) are needed to graduate. Students are also required to complete a six weeks internship to fulfill degree requirements. The maximum duration to complete this degree is four years.

Master in Project Management (MPM)

The Master in Project Management (MPM) is designed to enable individuals to manage complex projects through modern project management approaches. MPM is a one-year evening program comprising 33 credit hours spread over two semesters. Total eleven courses are required to graduate. Maximum time limit to complete the MPM degree is four years.

Master of Advertising (MoA)

The Faculty of Media Sciences at SZABIST offers an evening, 18 months Master's degree program in Advertising, providing students with a comprehensive training through courses that prepare them to engage in various career options in the advertising industry. To be awarded a Master of Advertising degree, students are required to complete a total of 30 credit hours which include 8 courses and a 6-credit hours research project (8 courses include: 5 core courses and 3 electives). All students must complete their degree within four years.

Master of Education (MA Edu)

MA Education is a 2 years degree program offered to candidates who wish to pursue teaching as their career. It is a 63 credit hour program with 13 compulsory courses (3 credit hours each), 2 content specialization and Pedagogy related courses (3 credit hours each), 4 electives (3 credit hours each), Teaching practice (3 credit hours) and Thesis (3 credit hours). The candidates will have the opportunity to specialize in the fields of Teacher Education, Educational Leadership and Management or Early Childhood Education.

Master of Science in Public Health (MSPH)

MSPH at SZABIST is a two year program distributed into two streams i.e., MSPH (36 credit hours) and MSPH (60 credit hours). For MSPH (36 credit hours), the curriculum includes 10 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS. For MSPH (60 credit hours), the curriculum includes 18 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS. The maximum time limit to complete the MSPH degree is four years.

Master of Science in Project Management (MSPM)

SZABIST offers MS in Project Management (MSPM) program which is equivalent to MPhil. The program laying the foundation for students planning to pursue doctoral studies, offers two streams for MSPM. First stream is course work based and second is research based. In course work based stream, students are required to complete 10 courses of 03 credit hours each. In research based stream, the students are required to complete 08 courses of 03 credits hours each (24 credit hours) and two independent research studies (IRS) or a Thesis (06 Credit Hours). In either stream, they are required to complete 30 credit hours in total. The maximum time limit to complete the MSPM degree is four years and minimum time to complete is 1.5/2 years. All MSPM Students are required to clear GRE, GAT General test or HAT relevant with minimum 50% score.

Master of Science in Management Sciences (MSMS)

SZABIST offers MS degree with concentration in the specialized areas of Human Resource Management, Marketing and Finance. The MS program is an evening program and all classes are held during week days. There are two streams available for MS. One Stream is by Course Work and other one is by Research Work. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In Research Work Stream, the student is required to complete 8 Courses and Two IRS OR one Thesis. In both the streams, 30 credit hours to be completed. The time limit to earn an MS degree is from 1.5 to 4 years. As per HEC guidelines, all MS students are required to clear GAT General test or HAT relevant with minimum 50% score

Master of Science in Biosciences (MS Bio)

MS Biosciences at SZABIST is a two-year program spread over four semesters and consists 30 credit hours of teaching. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours or 2 IRS. Students can also take two additional courses in lieu of Thesis in order to complete total credit hours. The maximum time limit to complete the MS degree is four years. All MS Bio Students are required to clear GRE or GAT General/HAT relevant Test with minimum 50% score.

Master of Science in Social Sciences (MS SS)

SZABIST Department of Social Sciences offers MS degree in Psychology, Sociology, International Relations and Economics.

It is an evening program only and consists of 10 courses and/or a Thesis/Independent Research Studies of 30 credit hours. The maximum time limit to complete the MS degree is four years.

There are two streams available for MS. One Stream is Course Work Based Stream and other one is Research based Stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 Credit Hours) and Two IRS (6 Credit Hours) OR One Thesis (6 Credit Hours). In both the streams, 30 Credit hours to be completed. The time limit to earn an MS degree is from 1.5 to 4 years. As per HEC guidelines, all MS students are required to clear GRE or GAT General test or HAT relevant with minimum 50% score.

Master of Science in Computer Science (MS CS)

SZABIST offers MS (CS) degree in three domains: 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. Student has the option to complete MS through course work only or with research. If student opts for course work only, he/she is required to complete 11 courses of 3 credit hours each. Else, the student is required to complete 9 Courses (27 credit hours) and Two Independent Research Study (6 credit hours) OR One Thesis (6 credit hours).

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 courses to be determined in consultation with Program Manager). The candidates shall have to submit GRE (General)/GAT (General)/HAT relevant score of minimum 50%. The maximum time limit to complete the MS degree is four years.

Master of Science in Mechatronic Engineering (MS ME)

SZABIST offers MS (Mechatronic Engineering) degree with two specializations; namely: Robotics & Industrial automation and Smart Electromechanical Systems. The program is of 2-year duration and is offered in the evening. In addition to five core courses, students are required to complete 3 elective courses in their choice of specialization. Although students are encouraged to undertake Thesis/Research Project of 6 credit hours, but they also have an option to undertake two elective courses in lieu of the Thesis/Research Project in their choice of specialization. The maximum time limit to complete the MS degree is four years. As per HEC guidelines, all MS students are required to clear GRE or GAT General/HAT relevant test with minimum 50% score.

Master of Science in Educational Leadership and Management (MS ELM)

The MS in Educational Leadership and Management is a 1.5-2 years program. It is a 30 Credit hours program. There are two streams available for MS. One Stream is Course Work Based Stream and other one is Research based Stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 Credit Hours) and Two IRS (6 Credit Hours)OR One Thesis (6 Credit Hours). In both the streams, 30 Credit hours to be completed. The time limit to earn a MS degree is from 1.5 to 4 years. The program is accredited by National Accreditation Council for Teacher Education (NACTE). The students will have the opportunity to specialize in the fields of: School Administration/ Educational Leadership, Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, Guidance & Counseling, Curriculum development, Technology Integration in Education. All MS ELM Students are required to clear GRE or GAT General/HAT relevant test with minimum 50% score.

Master of Science in Media Studies (MS MD)

Faculty of Media Sciences offers a two year MS in Media Sciences program. Students enrolling in this program will be offered to select any one of the 3 streams of specialization; General Entertainment Content – GEC primarily for media professionals already engaged in leading creative teams of their respective media houses and are interested in polishing their cognitive as well as computer generated information skills; Production stream is for students engaged in middle management cadre in production houses as part of their creative teams in varied

capacities and are hampered in their careers because of lack of knowledge and understanding of production technique skills; Journalism stream is offered for all who want to develop an in depth understanding of journalistic practices and are interested in specializing in analytical skills related to both print and electronic media.

To be awarded an MS Media Sciences degree, students need to complete a total of 30 credit hours. All students must complete their degree within four years.

Doctor of Philosophy

SZABIST offers PhD degree in Management Sciences, Computing, Educational Leadership and Management, Social Science and Biosciences in strict adherence to the HEC guidelines.

The admission requirement for PhD is minimum 17.5 years of education, GAT Subject 60% or above and clearing the admission requirements of SZABIST. After admission, the student is required to complete the course work of 18 credit hours that includes five courses and one Independent Research Study. Maximum course load during semester is 9 credit hours. After course work, the student is required pass comprehensive examination in maximum two attempts. The dissertation carrying a weight of 30 credit hours is required to complete. Prior to submitting the dissertation, the student is required to publish a research paper in HEC recognized journal. The dissertation is sent for evaluation to two examiners in technologically advanced countries. The time limit to earn a PhD degree is from 3 to 8 years.

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

Grading Plan

The following Letter Grade Plan is followed at SZABIST:

PhD Computing can be done in various specialized areas 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 or computing.

In Social Sciences, specializations include International Relations, Economics, Psychology and Sociology.

In Educational Leadership and Management, specializations may include: School Administration/ Educational Leadership, Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, Guidance & Counseling, Educational Psychology, Curriculum development, Technology Integration in Education.



Letter	Range	Grade Point	Degree Requirement
A+	90 - 100	4.00	
А	85 - 89	3.75	
A-	80 - 84	3.50	
B+	75 – 79	3.25	
В	70 - 74	3.00	PhD Degree Requirement
В-	66 - 69	2.75	MS Degree Requirement
C+	63 - 65	2.50	Master's Degree Requirement
С	60 - 62	2.00	Undergraduate Degree Requirement
C-	55 – 59	1.50	
F	< 55	0.00	

PROSPECTUS 2018

NOTE:

- All applicants will be required to appear in an entrance test and interview/group discussion held by SZABIST.
- General paper (A Levels) will not be counted.
- Equivalency from Inter Board Committee of Chairmen (IBCC) is mandatory for O & A Levels/High School Diploma/IB Diploma or equivalent.
- Verification of last degree from Higher Education Commission of Pakistan (HEC) is mandatory for all Masters, MS, & PhD students.
- Equivalency of international degrees from Higher Education Commission of Pakistan (HEC) is mandatory for all Masters, MS, & PhD students.
- Students waiting for results can also apply (including first year with no supplementary).
- Admission of Foreign students are subject to clearance from the relevant Agencies/NoC from HEC.

BACHELOR DEGREE PROGRAMS

BBA/BABS/BS Programs

For admission in the BBA/BABS/BS programs, the candidate must have completed O-Levels (minimum 8 passes) and 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.

Candidates are required to have 50% marks in Intermediate (FSc) or O-Levels (minimum 8 passes) and A-levels (minimum 3 passes in at least two subjects; Biology, Chemistry, and Physics).

BE Mechatronic

The candidate must have completed Intermediate (Pre-Engineering)/O-Levels (minimum 8 passes) and A-levels (minimum 3 passes) or equivalent with a combination of (Physics, Chemistry and Mathematics) with minimum 60% marks.

Equivalency of grades for the candidates having Cambridge High School Certificate with Mathematics, Physics and Chemistry subjects are obtained as follows:

A-Level Grade	Equivalent Intermediate %
А	85
В	75
С	65
D	55
Е	45

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

Minimum 60% aggregate marks each in matriculation and in intermediate/equivalent exams.

B.Ed (1.5 Years) Secondary For admission in the B.Ed program, the candidate must possess16-years of Education (MA, M.Sc., M.Com. or equivalent) in any discipline like Sciences, Social Sciences, Humanities and others with at least Second Division/2.0 CGPA from a university recognized by HEC.

MASTER DEGREE PROGRAMS

Executive MBA

For admission in the EMBA program, the candidate must possess a Bachelors degree with minimum 50% marks/ 2.5 CGPA from a university recognized by the Higher Education Commission (HEC) in any field of study with 4 years work experience at mid level/high management position (verifiable) at some well known organization. This requirement is necessary to seek admission in this program.

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 2.5 CGPA 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 2.5 CGPA or 16 years of education with minimum 55% marks from a university recognized by the HEC.

MBA in Banking & Finance

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

MA in Education (MA Edu)

The candidate must have 14 years of education with minimum second division/2.0 CGPA from a university recognized by HEC.

Master in Project Management (MPM)

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

Master of Advertising (MoA)

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

Master of Science in Public Health (MSPH)

For admissions in the MSPH program, the candidate must have 16 years of education with minimum 50% marks/2.5 CGPA from a university recognized by HEC.

Following Candidates will be eligible to take MSPH Program of 36 credit hours:

MBBS/BDS/MD/BSc Nursing 4 Years/DVM/BSc Paramedics-4 years/BSPH/Pharm D/Equivalent/BS Physiotherapy/Equivalent and BS Biological and Life Sciences/Equivalent.

Following degree holders will be eligible to take MSPH of 60 credit hours:

Masters in Environmental Sciences/Business Administration/Nutrition and equivalent and Social Sciences (Sociology/Psychology/Anthropology).

GAT General/HAT relevant is mandatory for MS PH students with minimum 50% score.

Master of Science in Biosciences (MS Bio)

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

Master of Science in Media Studies (MS MD)

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

Master of Science - Project Management (MS PM)

For admission in the MSPM program, the applicant must possess a minimum of 16 years of education/4 year

Bachelor/Master degree with minimum 2.5 CGPA or minimum 55% marks from an HEC recognized university. Candidates are also required to pass GAT General/HAT relevant with minimum 50% score.

Master of Science - Educational Leadership and Management (MS ELM)

The candidate must have 16 years of education and a B.Ed degree with minimum second division/2.0 CGPA from an HEC recognized institution. GAT General/HAT relevant with minimum 50% score is also required.

MS Mechatronic Engineering

For admissions in the MS Mechatronic Engineering program, candidates must possess BE in Mechatronics/ Mechanical/ Electronics/Electrical/Telecommunication/Industrial/Manufac turing/Aerospace/Avionics with minimum 55% marks/2.0 CGPA from a university recognized by HEC. Bachelor of Engineering Degree must be accredited by PEC. GAT (General) or HAT relevant is mandatory for MS students with minimum 50% score.

Master of Science in Management Sciences

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

Master of Science in Computer Science

For admission to MSCS program candidates must possess 16 years of relevant education with minimum 60% marks/2.0 CGPA from a university recognized by HEC. GAT (General) or HAT relevant is mandatory for MS students with minimum 50% score.

MS (International Relations, Economics, Psychology & Sociology)

For admission in MS (International Relations, Economics, Psychology & Sociology) program, candidates must possess 16 years of relevant education with minimum 2nd Division/2.0 CGPA from a university recognized by HEC.

GAT (General)/HAT relevant is mandatory for MS students with minimum 50% score.

DOCTORAL DEGREE PROGRAMS

Amission Requirement

A candidate with MA/MS/MBA/MPhil or any other equivalent degree with minimum 17.5 years of formal education in the relevant field from 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 obtained minimum of 3.0 CGPA, cleared the admission test and interview, and have passed GRE/ GAT (subject) with minimum 60% score.

A student may be asked to complete other pre-requisite /deficiency courses/thesis before taking the required courses. The decision on 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 work and 30 credit hours dissertation) for Social Sciences, Educational Leadership and Management, Computing, Biosciences and Management Sciences. Following is the step by step procedure for PhD:

PhD Degree Milestones

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

Two interdisciplinary courses can be allowed with the 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 that includes 5 courses and one IRS. Maximum Course Load in each semester is 9 credit hours. A student must clear the comprehensive examination in maximum two attempts. After successfully passing it, 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 of 6 credit hours in which the student will work on Proposal for Dissertation. These 6 credits will be included in 30 credit hours of dissertation. The PhD research proposal must be presented before the Evaluation Committee.

Dissertation

A student may register for 3, 6, 9 or 12 credit hours in regular semesters (Spring or Fall). However, for resgistration in 12 Credit Hours, approval from Program Manager is required. No registration is allowed in Summer. The dissertation is expected to be completed in 2 years time after the completion of 1 year course work. The time frame for PhD Degree is minimum 3 years and maximum 8 Years.

Publication Requirements

All PhD candidates are required to write at least one research paper in the area of their research and submit it for publication in a journal recognized by the HEC. This paper must be published before sending the dissertation to two foreign examiners.

Progress Seminar(s)

Before sending the dissertation to two foreign examiners 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 necessary.

Final Defense

After receiving minimum two satisfactory evaluation reports from the external examiner, the candidate is required to appear for PhD final defense. A formal presentation of dissertation is required to be produced before Evaluation Committee in an open seminar along with viva voce exam.

Admission Test Alternates

Applicants may submit a minimum 1650/2400 or 1100/1600 score of SAT 1 for bachelors programs, 50% score of GMAT for Master Programs, 600 score of GMAT for EMBA, GAT (General)/GRE/HAT relevant with minimum 50% score for MS programs and GAT (subject) with minimum 60% score for all PhD programs.

GAT General or HAT relevant 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.

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.

MA Education Course Transfer

A maximum of up to 25% credits may be considered for transfer into MA Education program.

MBA Course Transfer

- A maximum of up to 6 credits may be considered for transfer into the MBA (36 credit hours) program. Research Project/Thesis is not transferable.
- A maximum of up to 36 credits may be considered for transfer into the MBA (72 credit hours) program. Research Project/Thesis 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.

MPM, MoA & B.Ed Course Transfer

A maximum of up to 6 credits may be considered for transfer into the Master of Project Management, Master of Advertising and Bachelor of Education 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 Doctoral Committee before formal acceptance into the PhD Program. The student may be required to take additional courses as recommended by the relevant program manager.

SZABIST Inter-Campus Transfer

For inter-campus transfer, the candidate must fulfill the admission requirements of the given program at the local campus, 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, transferability of certificate courses is as follows:

- Maximum 05 courses are transferable in under graduate program.
- 2/3 courses are transferable in Masters or MS program.
- Maximum 02 courses are transferable in PhD program.

The minimum letter grade of Certificate courses from SZABIST which are transferable to regular degree program within a time spam of one year are: for PhD its B and above, for MS its B- and above, for all master's program its C+ and above and for bachelor's programs its C and above.

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
- Chief Minister's SZABIST Merit and Need-Based Scholarships
- Sindh Endowment Fund Scholarships
- Baluchistan Education Endowment Fund Scholarships
- Baluchistan Endowment Fund Scholarships
- USAID funded Merit and Need-Based Scholarships
- HEC-Indigenous PhD 5000 Fellowship Program
- National ICT R&D Fund Scholarships
- National ICT Grassroots Research Initiative
- NTS Need-Based Scholarships Program
- Ihsan Trust's Qarz-e-Hasna Facility
- ACCA Accelerate Scholarships
- Ministry of Harmony and Interfaith Minority Scholarships
- Khairpur Poverty cum Merit Scholarships
- Various community-based 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 in the form of adjunct faculty positions to qualified and eligible PhD candidates.

All requests for financial assistance must be made after securing admission.

PROSPECTUS 2018

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 among Dubai, Islamabad, Larkana, Hyderabad and Karachi Campuses as well as in conducting seminars, lectures and presentations with foreign universities. Video Conferencing has been the most effective mode at SZABIST in bringing in live and interactive guest lecturers from national and international experts. 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 also 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 regulary. These seminars and lectures are in continuation of the Institute's policy towards entrepreneurship development and networking. Seminars are conducted and attended by the leading figures from business and industry as these sessions address various business practices.

Professional Development 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, business opportunities and to 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, Personality 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 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 computers along with broadband intranet and internet connectivity.

SZABIST computer laboratories are revamped with brand new labs space, furniture and latest machines with giga bite network connectivity to cater students requirements. "Campus licensing" of latest software, including development tools, and operating systems provide an unmatchable environment compared to majority of well-reputed universities of Pakistan.

SZABIST has computing facilities supported with 24x7 broadband connectivity of 128 Mbps committed bandwidth to the internet and intranet. SZABIST is Wi-Fi enabled since 2002. Two new computer labs are added to the existing labs infrastructure. Students with 802.11x capable devices (such as laptops, iPads, Cellphones, etc.) can access all network resources wirelessly. SZABIST has acquired Microsoft IT academy and Oracle Academic Alliance program.

SZABIST library hold a rich collection of books, Journals, Magazines and a large number of digital libraries and online databases. SZABIST Library has six work stations through which students can access unlimited number of journals and magazines. This facility is further extended to registered students through SZABIST network on demand. SZABIST library provides comfortable physical spaces and furniture with peaceful environment. 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.

SZABIST established Smart Lab, equipped with tremendous high speed 7th generation laptops for students. These laptops are connected with SZABIST network through WiFi. A state of the art Smart screen is also available for teacher and

students. They can interact to each other with more effective and robust way.

Research Committee (RC)

SZABIST places high emphasis on research and development and devotes conscious efforts to promote research culture among faculty and students alike. In this regard, a Research Committee (RC) is constituted to coordinate, record, and formalize diverse research activities across different departments and campuses to bring harmony and create an impact for national and international recognition of the university. Research publications produced by faculty and students are given a handsome remuneration depending on the level and merit of publications, vetted by RC. All sorts of participations in national and international conferences by the faculty & staff are approved by the RC. This may also propose a change in research policy for the university to BASR.

Doctoral Committee (DC)

The Doctoral Committee has a key function to monitor the progress of all MS and PhD students. The committee conducts its meetings quite regulatory and discuss and recommends the individual cases of all such students pertaining to approval of their work, selection of supervisors, co-supervisors, examiners, evaluators (national and international), recommends research seminars and all other related activities. The DC also ensures the research work carries its value to the society and is free from any un-ethical matters. In this regard, Departmental Ethics Review Committee (DERC) and Institutional Ethics Review Board (IERB) work under DC.

Board of Advanced Studies and Research (BASR)

Like any good university, SZABIST has also constituted a Board of Advanced Studies and Research (BASR), which holds its meetings twice a year to discuss and approve/disapprove, the recommendations sent by Doctoral and Research Committees. This is chaired by the President of SZABIST and co-chaired by the Vice President (Academics). The board further considers and reports to the authorities on the award of research degrees, proposes by-laws and policies regarding the initiation, execution, and award of research degrees; provides approvals on appointments of supervisors for postgraduate research students and approves titles and synopses for their theses or dissertations, as recommended by DC. The decisions taken in BASR are ratified in the Academic Council.

Academic Council

It is the highest academic statutory body of the university. Its meetings are held twice a year after completion of all departmental meetings, Board of Studies (BOS) meetings of all departments and BASR meetings. All the recommendations related to academic programs, introduction of new programs, changes in the existing programs, changes in the course outlines, etc. sent by the departments after a due process through BOS to Academic Council for further discussion and approval. The meeting is chaired by the President and co-chaired by the Vice President (Academics) and is participated by the members of Academic Council from all campuses of SZABIST.

Office of Research Innovation and Commercialization (ORIC)

Under the guidelines of Higher Education Commission, Pakistan, ORIC (Office of Research Innovation and Commercialization) has been established at SZABIST, headed by Director (ORIC). Broadly, ORIC works two ways, to bring the projects from the industries for the university and to introduce projects developed at university to the industry. It works on commercialization of research and helping startups to incubate, grow, create new jobs, products, services, markets, carryout innovation and bring funding. The ORIC's vision is to enable and lead Pakistan's transformation to a knowledge-based economy dependent upon innovation and entrepreneurship. ORIC may propose and guide to the Research Committee on research policies for the university. It may oversee structures and systems for sustainable research activities; maintain and administer the internal and external review of applications for external funding.

Executive Development Center (EDC)

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

Throughout 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 from campus to the corporate world.

EDC compile students' profiles and publishes the annual Graduate Directory in order to market SZABIST graduates to credible organizations.

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 in the beginning of every year at the campus in which leading companies are invited to discuss their recruitment policies and procedures, their current resource requirements and future vacancies. The students receive an opportunity to interact with company representatives directly.

To bridge the gap between classroom and real world, 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.

SZABIST Data Center

Nowadays, more and more emerging technologies and advancements capturing market at fast pace. These days organizations are shifting from individual servers to centralized systems, which increase reliability of online applications and services. Realizing the need of hour, SZABIST has shifted all its application and services to the Tier 3 Datacenter which spawns from admission process to transcript, digital biometric/face recognition attendance, e-procurement are a few to mention here.

SZABIST is the first university to that hosts all our services in-house, which includes web service, email service, DNS and VPN services. In the wake of new computing trends, SZABIST has established her own DATA CENTER facility that hosts and cater need of all campuses of SZABIST campuses.

Infrastructure Physical Strength:

- 3 x HP ProLiant DL380 G7
- 3 x Huawei RH2285
- 4 x IBM 3650/3650 M3
- 8 x Dell PowerEdge R320/R720/R730
- 1x 6 TB Dell MD3820F SAN
- 1 x 24 TB SnapServer NAS
- 1x Huawei NE40E-X3 Router
- CISCO 3800 Series Router
- CISCO ASA 5540 Firewall

ZAB Solutions

SZABIST has its own software house which develops software for the university and also ensures the complete management and execution of ERP to dynamically handle the affairs of the university. Students also have an opportunity to use this platform to develop their software skills.

Following are the objectives of SZABIST Incubator under the guidance of ZAB Solutions:

- 1. Provide a practical framework for knowledge and technology transfer to the students.
- 2. Develop the confidence and competencies for building software and technology enterprise.
- 3. Involve students in software research and development.
- 4. Provide high quality research and constancy services as a resource for companies.
- 5. Enhance partnerships between the Industry and the Academia.
- 6. Provide faculty and the students with innovative support facilities.

Many projects are currently under development at the incubator.



ZABFM

ZABFM 106.6 is an in house FM broadcasting station, is an initiative by Shaheed Zulifkar Ali Bhutto Institute of Science & Technology and it was a very substantive step into the field of education, it is an honor for the nation as we are producing the talented and most efficient candidates in the form of great speakers to the nation along with the responsibility of spreading education, awareness, skill & aesthetic approach through the airwaves.

ZABFM 106.6 is the first educational radio with the allotted frequency 106.6 MHz by Pakistan Electronic Media Regulatory Authority (PEMRA) since 18th June 2007, and it is performing 24/7 radio station at Karachi, Islamabad and Larkana simultaneously.

It is a non-commercial radio broadcast station, exclusively to impart and disseminate education to the masses.

The 24/7 programming schedule covers various subjects of life like, career counseling, planning and development, education, infotainment, awareness, research, documentaries, talk shows, sports, travel, science & technology, media, culture & society, technology & inventions, Info tech and social order etc.

Newsletters

SZABIST publishes Newsletter on regular intervals from all its campuses to update about the activities taking place at the campuses.

SZABIST Student Council (SSC)

The SZABIST Student Council (SSC) since its inception in 2009 has been a body of hardworking, ambitious and talented individuals who are elected under the supervision of the Election Commission of SZABIST with members of its work force also selected by means of an entrance test and screening process all on an annual basis to form the student government at the institute. For almost a decade, the philosophy of the student council has been one in congruence with the values espoused in the ideology of SZABIST, those of leadership, art & creativity and tolerance and scientific thought along with serving the community through social work.

Trained to stand by the principles of labour, knowledge and integrity the SSC membership cutting across all degree programs of the institute aims at helping to explore the talents of all students whilst also playing an intermediary role between the administration/management and student body at large, working towards adding value to student life at SZABIST. The SSC also hosts entertainment events, organizes trips, conferences, focuses heavily on working for social welfare, produces seasonal SSC merchandise (such as shirts, mugs, banners, or any other promotional material), and guides fellow students in addressing issues related to their campus life acting as a forum that becomes the voice of the student body of the institute. Furthermore, it acts as a parent body to its chapters in other campuses of SZABIST namely, SSC-Hyderabad Chapter, SSC-Islamabad Chapter and SSC-Larkana Chapter and SSC-Dubai Chapter.

All student associations, clubs and student societies are formed as per a prescribed procedure working under the aegis of the SZABIST Student Council and conduct a wide range of activities to do with sports, entrepreneurship, performing arts, culture, literature, public speaking, science and technology, model United Nations and social work to name a few.

All student associations, clubs, and organizations fall under the purview of the SSC and are required to register with the administration once they are formed. To ensure that democratic norms are adhered to, every year proper elections are held for the various offices of these student societies under the supervision of Student Council/Student Advisor/SZABIST Election Commission.

The following club/societies are currently active on Campus:

ACM	Association of Computing Machinery
	(SZABIST Karachi, ACM Chapter)
AIESEC	Student Exchange Program Facilitation
ASME	American Society of Mechanical Engineers
SCS	SZABIST Cultural Society
IEEE-SSB	Institute of Electrical and Electronics
	Engineers-SZABIST Student Branch
KSCLC	Karachi SZABIST Campus Lions Club
RCoSKM	Rotaract Club of SZABIST Karachi Midcity
SBS	SZABIST Bioscience Society
SES	SZABIST Entrepreneurial Society
SLS	SZABIST Law Society
SOS	SZABIST Oratory Society
SSSS	SZABIST Social Science Society
SSS	SZABIST Sports Society
ZABLITS	SZABIST Literary Society
ZABMUN	Zulfiqar Ali Bhutto Model United Nations
ZABPAS	SZABIST Performing Arts Society

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National and International Linkages and Collaborations

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

- 1. International Association of Universities (IAU), Paris
- 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
- Association of Quality Assurance Agencies of the Islamic World (AQAAIW), Malaysia
- 8. The Talloires Network, USA
- 9. Chartered Institute of Logistics and Transport (CILT), UK
- 10. Management Association of Pakistan (MAP), Karachi
- 11. Marketing Association of Pakistan (MAP), Karachi
- 12. Human Resource Development Network (HRDN), Islamabad

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

1. Social, Entrepreneurship and Equity Development (SEED)

The partnership is aimed at overcoming societal tests by using entrepreneurship as an instrument to create a positive social impact. Primarily, Student Leadership Workshops and Inter University Competitions will be the prominent initiatives undertaken to bring about the social impact.

2. Momentum

This MoU is for creating an eco-system favoring start-ups in Pakistan.

3. Aman Health Care Services (AHCS)

Under the framework of Sukh Initiative, ACHS and SZABIST will make collaborative efforts to promote family planning, by transferring educational content via short videos.

4. Pak-China International Education System(PCIES)

This MoU is aimed at offering Chinese Language course to SZABIST students.

5. ASER — Alliance Pakistan (AAP)

This MoU will enable SZABIST to access insights on disability, technology use, gender parity, parental education etc. A technical-advocacy alliance for benchmarking and assessment of data sets for research and development.

6. Adamjee Life Assurance Company Limited

Adamjee Insurance customers who are students of SZABIST Bachelor programs will enjoy discounts through their Loyalty Card Program.

7. The International Committee of the Red Cross (ICRC)

Development and promotion of legal measures for respect and right of way for ambulances in Sindh.

8. Coventry University, UK

Under the agreement, Coventry University 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.

9. The Citizen Foundation

As part of social responsibility, SZABIST and TCF have collaborated to facilitate TCF students with admission fee waiver, and scholarship opportunities to study in any of SZABIST degree programs.

10. EDUCAST (Pvt.) Limited

Under this Agreement SZABIST and EDUCAST will work towards developing projects through funding from Local and International Donors to establish Innovative services for using information and communication technology in development of robotics for education and Training.

11. Istanbul Medipol University, Turkey

This MoU will present numerous opportunities to SZABIST for initiating mutually-rewarding R&D projects, and student & faculty exchange programs.

12. Searle Company Limited

Searle through this MoU aims to recruit SZABIST graduates in an one-year rotational intensive management trainee program. The program will prepare students to gain entry in the job market with the required practical and vocational skills.

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13. Association of Chartered Certified Accountants (ACCA)

Under this MoU, SZABIST has acquired 9 courses exemption (F1-F9) for its BS A&F program. This facility is provided by ACCA Global for all SZABIST Campuses.

Moreover, the students appearing in professional modules for getting ACCA qualification will be able to get fee discount from ACCA Global.

14. Sindh Police

This MoU is aimed at providing complete tuition fee waiver to the children of Shaheed police officers who successfully secure admission in SZABIST.

15. National Testing Services (NTS)

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

16. 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.

17. Ihsan Trust

The MoU with Ihsan Trust is aimed at provision of Qarz-e-Hasna (Interest-free Loan) facility up to 100 % of tuition fee to SZABIST students.

18. 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, work- shops, individual mentoring sessions by qualified professionals, and other related activities.

19. University of London, UK

SZABIST is a registered center of University of London for providing coaching and preparing the students to appear in the LLB exams conducted by University of London through British Council.

20. CISCO Networking Academy

SZABIST Karachi Campus is an authorized CISCO Network Academy to conduct IT-essentials, CCNA routing & switching, and CCNA security certifications.

21. Microsoft IT Academy

SZABIST has acquired Microsoft IT Academy program with collaboration of HEC. Students of SZABIST get free training of Computer Science, and IT Infrastructure.

22. Project Management Institute Islamabad Chapter

The objective of this agreement is to promote project management awareness and collaborate with academia to nurture young professionals as well as project management practices.







The faculty of management sciences at SZABIST equips 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, MIS and Supply Chain Management.

PROGRAM AND FACULTY

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

Vision

SZABIST Faculty of Management Sciences (FMS) Karachi aspires to become one of the leading business education institute in the country for excellence in education and services distinction in research and innovation.

Mission

SZABIST Business School is committed to:

- Produce highly qualified business professionals to meet dynamic and challenging contemporary needs.
- Generate scientific knowledge and expertise for business and economic solutions.
- Build sustainable environment for corporate and entrepreneurial mindset.
- Serve the community through student, faculty, and alumni collaboration.

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, IT or Supply Chain Management. To obtain the BBA degree, the students have to complete 144 credit hours and an internship. The degree needs to be completed within six years.

First Year

Fall Semester

BA 1101	Introduction to Accounting
BA 1106	Islamiat and Pakistan
	Studies/Humanities
BA 1108	IT in Business
BA 1109	Personal Management and
	Communication
BA 1204	Maths for Business
BA 1206	Oral Communication and
	Presentation Skills

Spring Semester

BA 1102	Microeconomics
BA 1105	English Writing Skills
BA 1201	Financial Accounting
BA 1203	Management Principles
BA 2307	Sociology
BA 2312	Human Behavior

Second Year

Fall Semester

BA 1202	Macroeconomics
BA 1211	Logic and Critical Thinking
BA 2301	Introduction to Business Finance
BA 2303	Marketing Principles
BA 2403	Business Ethics

BA 2408 Cost Accounting

Spring Semester

BA 2311	Business Statistics
BA 2401	Money and Banking
BA 2402	Retail Management
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)



BA 3506	Foreign Languages
BA 3519	Current Affairs
BA 3613	World Economy
BA 3614	Business Analysis and Forecasting*
BA 3619	Enterprise Management
BA 4701	Islamic Banking and Finance*
BA 4707	Marketing Research*
BA 3515	Graphic Design for Multimedia*
BA xxxx	Professional Development
BA xxxx	Auditing

ELECTIVES

Finance

BA 4115	Derivatives
BA 4214	Micro Finance
BA 4218	Financial Research
BA 4735	Islamic Banking and Finance*
BA 4719	Investment Banking
BA 4724	Financial Modeling
BA 4727	Dynamics of Banking
BA 4734	International Banking
BA 4752	Financial Reporting and Analysis
BA 4756	Econometrics
BA 4831	Portfolio and Investment
	Management
BA 4833	Security Analysis
BA 4834	Treasury and Funds Management
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BA 4855 Financial Risk AnalysisBA 4867 Business Analysis and Forecasting*

Marketing

BA 4116	Supply Chain Management
BA 4125	Emerging Media
BA 4126	Trade Marketing
BA 4217	Experiential Marketing
BA 4836	Marketing Research*
BA 4721	Advertising
BA 4722	Brand Management
BA 4739	Export Marketing
BA 4815	Event Management
BA 4816	Industrial Marketing
BA 4821	Media Planning
BA 4824	Sales Management
BA 4842	Graphic Design for Multimedia*
BA 4859	Product Innovation and Design
BA 4866	Integrated Marketing Communications

Supply Chain Management

BA 4116	Supply	Chain	Management
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BA 4126	Trade Marketing
BA 4211	Production Management
BA 4768	Total Quality Management
BA 4739	Export Marketing
BA 4742	Customer Relationship Management
BA 4764	Dynamics of Logistics and
	Distribution
BA 4824	Sales Management
BA 4844	Operations Research
BA 4859	Product Innovation and Design
BA 4766	Purchase Management

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 4812	Recruitment and Selection
BA 4813	Training and Development
BA 4815	Event Management
BA 4826	Talent Management
BA 4837	Performance Appraisal
BA 4844	Operations Research

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

**Research Project (BA 4807) 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 six courses (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.

BS Accounting & Finance

BS (A&F) is a four years (eight semesters) program and consists of 144 credit hours of teaching. Students are required to complete 46 courses and a 6 credit hours of final year project along with six weeks of internship to graduate. Students completing BS (A&F) will get an exemption in ACCA modules from F1 to F9. The maximum duration to complete this program is six years.

First Year

Fall Semester

- AF 1101 Business Mathematics
- AF 1102 Computer Concepts and Applications
- AF 1104 Introduction to Financial Accounting
- AF 1105 Pakistan Studies
- AF 1203 Communication Skills
- AF 1205 Islamic Studies/Humanities

Spring Semester

- AF 1103English ComprehensionAF 1106Principles of Management
- AF 1201 Advanced Financial Accounting
- AF 2303 Introduction to Psychology
- AF 2304 Introduction to Sociology
- AF 2405 Principles of Microeconomics

Second Year

Fall Semester

AF 1202	Calculus for Business Studies
AF 1206	Principles of Marketing
AF 2302	Cost Accounting
AF 3503	Business Ethics
AF 3505	Principles of Macroeconomics
AF 4703	Introduction to Business Finance

Spring Semester

AF 2301	Business and Technical English
	Writing
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- AF 2305 Organizational Behavior
- AF 2401 Management Accounting AF 2402 Management Information Sys
- AF 2402 Management Information Systems
- AF 2404 Money and Banking
- AF 2406 Statistics and Probability

Third Year

Fall Semester

AF 3501	Accounting and Financial
	Information Systems
AF 3502	Auditing
AF 3506	Statistical Inference
AF 3603	e-Commerce
AF 3606	Taxation
AF 3608	Islamic Banking and Finance
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Spring Semester

AF 1204	Introduction to Human Resource
	Management
AF 2403	Marketing Management
AF 3607	Corporate Accounting
AF 4701	Business and Labor Law
AF 4702	Financial Management
AF 3609	Business Research Methodologies

Fourth Year

Fall Semester

- AF 4708 Financial Risk Management
- AF 4704 Islamic Financial System
- AF 4707 Company Law
- AF 4801 Corporate Finance
- AF 4804 Investment Analysis and Portfolio Management
- AF 4805 Management of Financial Institutions

Spring Semester

AF 2306	Pakistan Economic Policy
AF 3504	Entrepreneurship and Small
	Business Management
AF 3605	Financial Reporting
AF 4808	Final Project
AF 4803	International Financial Management
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All courses may not necessarily be offered every year. Alternate courses may be substituted as and when needed. Fulltime academic load is 18 credit hours. All students are required to register for full load in 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

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

Students can also complete the BABS degree at SZABIST by opting for the 3rd and 4th year of BABS program. Those who opt for this continuation program will then stay in this program and will not be allowed to transfer to any other program. The maximum duration to complete this degree is six years.

First Year

Fall Semester

- BA 1101 Introduction to Accounting
- BA 1102 Microeconomics
- BA 1103 Introduction to Computers
- BA 1104 Personal Management
- BA 1206 Oral Communication and
- Presentation Skills
- BA 1204 Maths for Business

Spring Semester

- BA 1201 Financial Accounting
- BA 1202 Macroeconomics
- BA 1203 Management Principles
- BA 1105 English Writing Skills
- BA 2305 Statistics and Mathematics for Business
- BA 2312 Human Behavior

Summer Semester

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

Second Year

Fall 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

Spring 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

Third Year

Fall Semester

- BA 1106 Islamiat and Pakistan Studies
- /Humanities
- BA 4804 Human Resource Management
- BA 2406 Business and Electronic Communication BA 3517 Entrepreneurship and Small Business
- Management
- BA 3518 Law for Managers
- BA 1207 Introduction to Logic

Spring Semester

- BA 3617 Introduction to International Business
- BA 2401 Money and Banking
- BA 3616 Customer Relationship Management
- BA 3618 Leadership Development
- BA 3519 Current Affairs
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Fourth Year

Fall 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

Spring Semester

- BA 4807 Research Project
- BA 4827 Professional Development
- BA 4814 Project Management
- 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.

BS Entrepreneurship

SZABIST offers a four-year (eight semesters) BS Entrepreneurship degree program of 144 credit hours. For the BS Entrepreneurship program, the students are required to complete 45 courses and a 9 credit hours Capstone Project. The courses include 41 compulsory courses and 4 electives. To obtain the BS Entrepreneurship degree, students have to complete 144 credit hours and 2 apprenticeships. Maximum time limit to complete the BS Entrepreneurship degree is six years.

First Year

Fall Semester

- EN 1103 Introduction to Accounting
- EN 1105 Islamiat and Pakistan Studies /Humanities
- EN 1102 Computer Applications in Business
- EN 1104 Introduction to Human Behavior
- EN 1101 Business Mathematics and Calculus
- EN 1106 Oral and Written Communication

Spring Semester

- EN 1203 Introduction to Sociology
- EN 1201 Accounting for Business Operations
- EN 1205 Microeconomics
- EN 1202 Business and Electronic Communication
- EN 1206 Personal Management
- EN 1204 Management Principles

Second Year

Fall Semester

- EN 2303 Macroeconomics
- EN 2302 Logic and Critical Thinking
- EN 2301 Introduction to Business Finance
- EN 2305 Marketing Principles
- EN 2304 Managerial Statistics
- EN 2306 Organizational Behavior

Spring Semester

EN 2405 Media Management

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EN 2404 Introduction to EntrepreneurshipEN 2401 Business and Labour LawsEN 2403 Consumer Behavior

- EN 2406 Operations Management
- EN 2402 Business Ethics

Third Year

Fall Semester

- EN 3502 Business Plan Development
- EN 3501 Business Analysis and Forecasting
- EN 3503 Entrepreneurial Marketing
- EN 3504 Finance and Taxation for Entrepreneurs
- EN 3506 Sustainability and Technology
- EN 3505 Marketing Research

Spring Semester

- EN 3609 Capstone Project-I
- EN 3603 Launching a Venture
- EN 3602 Human Resource Management
- EN 3605 Product Innovation and Design
- EN 3601 Analysis of Pakistani Industries
- EN 3604 Logistics and Supply Chain Management

Fourth Year

Fall Semester

- EN 4709 Capstone Project-II
- EN 4701 Issues in Pakistan's Economy
- EN 4702 Financing a Venture
- EN 4703 Emerging Media
- EN 4xxx Elective-I
- EN 4xxx Elective-II



Spring Semester

EN 4809	Capstone Project-III
EN 4801	Business Policy and Design
EN 4802	Innovative Business Models
EN 4803	SME Management
EN 4xxx	Elective-III
EN 4xxx	Elective-IV

Electives

EN 4xxx	Mergers and Acquisition
EN 4xxx	Legal Framework for Entrepreneurs
EN 4xxx	Trade and Retail Management
EN 4xxx	Export Marketing
EN 4xxx	Services Marketing
EN 4xxx	Business Development
EN 4xxx	Social Entrepreneurship
EN 4xxx	Technopreneurship
EN 4xxx	Intrapreneurship
EN 4xxx	Agribusiness Management
EN 4xxx	Family Business Management
EN 4xxx	Women Entrepreneurship and
	Leadership

EN 4xxx	Crisis Management
EN 4xxx	Managing and Growing a Business
EN 4xxx	Creativity and Business
EN 4xxx	Applied Game Theory
EN 4xxx	Executive Leadership

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 (18 credit hours). All students are required to register for full load in the first semester.

Apprenticeship

It will be mandatory for students to have two 6-week apprenticeships with two different entrepreneurs working in their area of interest. During apprenticeship students will have an insider's look at the various businesses and be mentored by some of the most successful entrepreneurs to supplement their curriculum learning.

Executive Master of Business Administration

The EMBA is a 2-year program spread over four semesters and consists of 66 credit hours of teaching. Twenty courses (60 credit hours), one Business Project (3 credits) and one Research Project (3 credits) are needed to graduate. Maximum time limit to complete the EMBA degree is 4 years.

First Year

Fall Semester

- BE 417 Accounting for Business
- BE 421 Economics for Business
- BE 451 Business Application of IT
- BE 492 Business Management
- BE 413 Quantitative Analysis for Decision Making

Spring Semester

- BE 445 Managerial Accounting and Control
- BE 415 Contemporary Marketing
- BE 416 Organizational Behavior
- BE 447 Managerial Communication
- BE 414 Business Finance
- BE 406 Applied Research Methods

Second Year

Fall Semester

- BE 478 Business Project
- BE 423 Human Resource Management
- BE 434 Marketing Management
- BE 449 Operations and Supply Chain Management
- BE 4xx Elective-I (Marketing, HR, Finance and Supply Chain)

Spring Semester

- BE 419 Strategic Management
- BE 443 Entrepreneurship and Family Businesses
- BE 444 Ethics and Corporate Governance
- BE 4xx Elective-II (Marketing, HR, Finance and Supply Chain)
- BE 4xx Elective-III (Marketing, HR, Finance and Supply Chain)
- BE 448 Research Project

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ELECTIVES

Marketing

- BE 432 Services Marketing
- BE 436 Retail Management
- BE 472 Media Planning and Management
- BE 473 Advertising
- BE 474 Brand Management
- BE 484 Consumer Behavior
- BE 491 Customer Relationship Management
- BE xxx Integrated Marketing Communications
- BE xxxDigital MarketingBE xxxEmerging Media
- BE xxx Experiential and Content Marketing
- BE xxx Export Marketing
- BA xxx Global Marketing

Finance

- BE 424 International Banking and Finance
- BE 481 Corporate Finance
- BE 482 Islamic Banking and Finance
- BE 483 Analysis of Financial Statements
- BE 487 Portfolio and Investment Management
- BE 488 **Project Evaluation**
- BE xxx **Banking Operations**
- BE 409 **Financial Modeling**
- BE 487 Portfolio and Investment Management
- BE 477 Treasury and Funds Management

Human Resource Management

- BE 427 Leadership and Motivational Techniques
- BE 471 Compensation Management
- BE 476 Recruitment and Selection
- BE 485 Performance Appraisal
- BE 486 Training and Development
- BE xxx Conflict Resolution
- BE xxx Crisis Management
- BE xxx HR Analytics
- BE xxx Salary and Compensation
- BE xxx Talent Management and Succession Planning
- 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

- BE xxx Advance Manufacturing and TPM in SCM
- BE xxx Detailed Scheduling and Planning in SCM
- BE xxx Execution and Control of Operations in SCM
- BE xxx Supply Chain Finance

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.







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MBA Program

(36 credit hours program for students with 4-year BBA degree/equivalent business degree)

For students with a 4-years BBA degree or equivalent business 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) Or Thesis (6 credit hours) are needed to graduate. Students are also required to complete a 6-week internship. The maximum duration to complete this degree is 4 years.

First Year

Second Year

Fall Semester

BA 5501Applied Research MethodsBA 5104Strategic ManagementBA 5xxxElective-IBA 5xxxElective-II

Spring Semester

BA 5203Strategic MarketingBA 5601Strategic HRMBA 5208Strategic FinanceBA 5xxxElective-III

Fall Semester

BA 5308 International Business
BA 5xxx Elective-IV
BA 5609 Academic Research Project (6 Credits)
BA 5509 Business Research Project (6 Credits)
BA 5109 Thesis (6 Credits)

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

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

MBA Program

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

For students with 4-year non-business degree/16-years of education, the duration of the MBA program is 2.5-years. Twenty-two courses (66 credits) and Business Research Project (6 credits) or Academic Research Projects (6 credits) or Thesis (6 credit hours) are needed to graduate. Students are also required to complete a six-week internship. The maximum duration to complete this degree is 4 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

Second Year

Fall Semester

- BA 5308 International Business
- 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 5609	Academic Research Project (6 Credits)
BA 5509	Business Research Project (6 Credits)
BA 5109	Thesis (6 Credits)

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

*A student may take Academic Research Project or Business Research Project or Thesis.

ELECTIVES

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 5138 Econometrics
- BA 5139 Financial Risk Analysis
- BA 5151 International Finance
- BA 5155 Mergers and Acquisitions
- BA 5175 Banking Operations
- BA 5179 Commodity Pricing
- BA 5184 Financial Product Regulations
- BA 5187 Business Analysis and Forecasting
- BA 5229 Financial Modeling
- BA 5231 Islamic Banking and Finance
- BA 5232 Portfolio and Investment Management
- BA 5235 Treasury and Funds Management
- BA 5244 Investment Banking
- BA 5254 Fundamentals of Financial Engineering
- BA 5262 Behavioral Finance
- BA 5273 Prudential Regulations
- BA 5278 Banking Crises and Management
- BA 5284 Theory and Practice of Lending
- BA 5192 Financial Management Policy
- BA 5294 Venture Capital and Private Equity
- BA 5298 Financial Reporting and Analysis

Human Resource Management

- BA 5114 Leadership and Motivation Techniques
- BA 5118 Compensation Management
- BA 5117 Performance Appraisal
- BA 5159 Salary and Compensation
- BA 5164 Human Resources Information Systems
- BA 5165 Job Analysis and Design
- BA 5167 Talent Management and
- Succession Planning
- BA 5185 Leadership Development
- BA 5193 HR Operations and Business Partnering
- BA 5196 Conflict Resolution
- BA 5215 Recruitment and Selection
- BA 5216 Training and Development

- HR Policy Development BA 5239
- BA 5251 Human Resource Development
- Performance Management BA 5285
- BA 5292 **HR** Analytics
- BA 5297 Human Capital Development and Analytics
- BA xxx Human Resource Audit
- BA xxx Contemporary Issues in Human Resource Management
- Human Resource Management and BA xxx Technology

Management

- **Business Process Re-engineering** BA 5111
- BA 5112 Change Management
- BA 5113 Industrial Management and Labor Relations
- BA 5116 Industrial Relations and Labor Laws
- BA 5136 Business Strategy and Policy
- BA 5152 **Event Management**
- BA 5172 Entrepreneurial Business Strategy
- BA 5213 **Project Management**
- BA 5295 Crisis Management
- BA xxx Corporate Sustainability
- BA 5242 Lean Six Sigma Manufacturing
- BA xxx Hospitality and Tourism Management
- BA xxx **Business Theory**
- **Business Application** BA xxx

MIS

- BA 5156 e-Commerce Strategies and Management
- BA 5163 Enterprise Resource Planning
- BA 5169 Technology Management and Innovation
- Business Intelligence and BA 5181
- Data Warehousing
- e-Commerce BA 5241

Marketing

- BA 5121 Advertising
- BA 5122 Brand Management
- BA 5123 **Consumer Behavior**
- BA 5124 **Customer Relationship Management**
- BA 5126 Export Marketing
- BA 5127 **Global Marketing**
- BA 5129 Services Marketing
- BA 5171 Strategic Advertising
- BA 5182 Trade Marketing
- BA 5186 Social Marketing
- BA 5199 Integrated Brand Communication
- BA 5217 Industrial Marketing
- Media Planning and Management BA 5224

BA 5225 Personal Selling

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BA 5226 Pharmaceutical Marketing BA 5227 Sales Management BA 5228 Retail Management BA 5246 **Public Relations** Integrated Marketing Communications BA 5256 BA 5259 **Emerging Media** BA 5264 Interactive Global and Regional Marketing BA 5269 Marketing Intelligence BA 5281 Digital Marketing BA 5286 Media Marketing BA 5293 New Product Development Process and Innovation BA 5296 Rural Marketing BA 5198 Experiential and Content Marketing BA 5299 Media Management BA 5141 Public Relations Management BA 5xxx Marketing Practices in Pakistan BA 5xxx Marketing Analytics BA 5xxx Packaging for Brands

Supply Chain Management (SCM)

BA 5191 Advance Manufacturing and TPM in SCM BA 5194 Supply Chain Finance

MBA in Banking & Finance

BA 5214 Supply Chain Management BA 5263 Dynamics of Logistics and Distribution **Operational Planning in Supply Chain** BA 5265 BA 5266 Strategic Procurement in SCM BA 5287 Execution and Control of Operations in SCM BA 5291 Detailed Scheduling and Planning in SCM Materials Management BA 5142 BA 5xxx Shipping in SCM BA 5xxx Green Supply Chain Management BA 5xxx Supply Chain Operations

Internship

All MBA students are required to complete a 6-weekinternship. (SZABIST has a separate internship and placement department (EDC) that supports students in finding a suitable opportunity for their internship). Completion of 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.

MBA (B&F) is a 36 credit hours program for student with a 4-year BBA degree/equivalent business degree. For students with a 4-year BBA degree or equivalent business 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) or Thesis (6 credit hours) are needed to graduate. Students are also required to complete a 6-week internship. The maximum duration to complete this degree is 4 years.

First Year

Fall Semester

- BA 5501 Applied Research Methods
- BA 5273 Prudential Regulations
- BA 5235 Treasury and Funds Management
- BA 5xxx Elective-I

Spring Semester

BA 5175 Banking OperationsBA 5222 Credit Analysis and AppraisalBA 5139 Financial Risk AnalysisBA 5xxx Elective-II

Second Year

Fall Semester

BA 5xxx Elective-III

BA 5xxx Elective-IV

- BA 5609 Academic Research Project
- (6 credits) OR
- BA 5509 Business Research Project (6 Credits)
- BA 5109 Thesis (6 Credits)

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

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

ELECTIVES

BA 5xxx	Asset Management
	International Finance
BA 5158	Micro and SME Finance
BA 5223	Marketing of Financial Services

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BA 5229	Financial Modeling
BA 5231	Islamic Banking and Finance
BA 5255	Fixed Income Securities
BA 5262	Behavioral Finance
BA 5278	Banking Crises and Management
BA 5294	Venture Capital and Private Equity
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 Planning and Budgeting
BA 5xxx	Financial Systems
BA 5xxx	Foreign Exchange Operations and
	Management
BA 5xxx	Banking Insurance

- BA 5xxx Information System Audit
- BA 5xxx Leasing Strategies and Regulations
- BA 5xxx Mergers and Acquisitions in Banking
- BA 5xxx Options and Derivatives
- BA 5xxx Project Financing
- BA 5xxx Theory and Policy of Modern Finance

Internship

All MBA (B&F) students are required to complete a 6-week internship. SZABIST has its separate internship and placement department (EDC) that support students in finding a suitable opportunity 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.

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 one-year evening program comprising 33 credit hours spread over two semesters. Eleven courses are required to graduate. The maximum time to complete the degree is 4 years.

First Year

Fall Semester

PM5102	Fundamentals of Project Management
PM5104	Cost and Financial Management for
	Project Management
PM5105	Project Scope
PM5310	SAP Training
PM5201	Project Scheduling, Planning and
	Time Management
	-
. . .	

Spring Semester

- PM5301 Project Quality Management
- PM5351 Project Risk Management
- PM5309 Project in Primavera
- PM5xxx Elective-I
- PM5xxx Elective-II
- PM5209 Project

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

ELECTIVE

PM 5151 Enterprise Resource PlanningPM 5152 Innovation and Technology Management

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 5257 Simulation for Project Management
PM 5303 Project Monitoring, Evaluation and Control Management
PM 5352 Project Stakeholders Management
PM 5353 Research Methods for Project Managers
PM 5354 Leadership, Team and Communication for Project Management
PM 5355 Project Communication, Reporting and Presentation

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

MPM students may switch to MSPM program before third week of first semester or after first semester, with relevant courses transferred and subject to meeting MSPM admission requirements. This option cannot be exercised in and after second semester.

PROSPECTUS 2018

Master of Science in Project Management

There are two academic streams available for MSPM. The students are required to complete 8 courses and 2 Independent Research Studies (IRS), or a thesis, with a total of 30 credit hours as a part of research work based stream. Alternatively, Candidate may opt for 30 credit hours of course work based program by taking only 10 courses. The breakup of 30 credit hours under each stream is as follows:

Research Based Stream

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

Course Work Based Stream

- Four compulsory courses (12 credit hours)
- Six elective courses (18 credit hours)

First Year

Fall Semester

MP 5107Fundamentals of Project ManagementMP 5105Advanced Project ManagementMP 5202Quantitative Tools for ResearchMP 5xxxElective-I

Spring Semester

MP 5103	Research Methodology
MP 5xxx	Elective-II
MP 5xxx	Elective-III
MP 5xxx	Elective-IV

Second Year

Fall Semester

MP 5xxx Thesis-I* OR Independent Research Study-I*/Elective-V** MP 5xxx Independent Research Study - II/Elective-VI**

Spring Semester

MP 5xxx Thesis-II

* Thesis to be registered in two parts while Independent Research Study-I and Independent Research Study-II can be opted in one semester by research stream students.

** Elective-V and Elective-VI to be opted by students following course work scheme.

MSPM students may switch to MPM program after admissions before third week of first semester or after completion of first semester. This option; however, cannot be exercised in and after second semester.

ELECTIVES

- MP 5102 Project Management Constraints MP 5201 Quality Management Tools MP 5205 Theories of Management Human Resource Management Communication MP 5215 MP 5217 Financial Decision Analysis Software Project Management MP 5218 Project Review, Assurance and Governance MP 5314 Supply Chain Management MP 5317 MP 5318 **Business Analysis** MP 5324 **Risk Management Dynamics** MP 5325 Project Simulation Project Scope MP xxxx MP 5223 Project Scheduling, Planning and Time Management
- MP xxxx Project Risk Management

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) or Thesis without completion of Research Methodology and Quantitative Tools for Research.

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.

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, IT Tools for Project Management and SAP Training are not transferrable towards MSPM degree completion requirements for MPM graduates.

All MSPM candidates are required to pass HAT relevant/ GAT General with minimum 50% score or GRE score as applicable for MS program.

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Master of Science in Management Sciences

There are two streams available for Master of Science. One Stream is by Course Work and other one is by Research Work. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Work Stream, the student is required to complete 8 Courses and Two IRS OR one Thesis of Six Credit hours. In both the streams, 30 Credit hours to be completed. The time limit to earn atn MS degree is from 1.5 to 4 years. The detail of two streams is as follows:

1. MS By Course Work Stream

- The Scheme of Study is as follows:
- Six Compulsory Courses
- Four Electives
- No IRS or Thesis

Compulsory Courses

- MS 5137 Research Methods and Techniques
- MS 5204 Quantitative Tools for Research
- MS 5112 Strategic Management
- MS 5244 Strategic Marketing
- MS 5318 Strategic Finance
- MS 5238 Strategic Human Resource Development

Electives (Electives in any of following areas subject to the offering of Course)

- Finance
- Marketing
- Human Resource Management

First Year

Fall Semester

- MS 5137 Research Methods and Techniques
- MS 5112 Strategic Management
- MS 5238 Strategic Human Resource Development
- MS 5244 Strategic Marketing

Spring Semester

MS5204Quantitative Tools for ResearchMS5318Strategic FinanceMS5xxxElective IMS5xxxElective II

Second Year

Fall Semester

MS 5xxx Elective III MS 5xxx Elective IV

2. MS By Research Work Stream

- The Scheme of Study is as follows:
- Six Compulsory Courses
- Two Electives
- Two IRS OR Thesis

Compulsory Courses

- MS 5137 Research Methods and Techniques
- MS 5204 Quantitative Tools for Research
- MS 5112 Strategic Management
- MS 5244 Strategic Marketing
- MS 5318 Strategic Finance
- MS 5238 Strategic Human Resource Development

Electives (Electives in any of following areas subject to the offering of Course)

- Finance
- Marketing
- Human Resource Management

First Year

Fall Semester

- MS 5137 Research Methods and Techniques
- MS 5112 Strategic Management
- MS 5238 Strategic Human Resource Development

MS 5244 Strategic Marketing

Spring Semester

- MS 5204 Quantitative Tools for Research
- MS 5318 Strategic Finance
- MS 5xxx Elective I
- MS 5xxx Elective II

Second Year

Fall Semester

MS 5xxx IRS I and IRS II OR MS 5xxx Thesis (Part I)

Spring Semester

MS 5xxx Thesis (Part II) If Any

PROSPECTUS 2018

ELECTIVES

Finance

MS	5113	Financial Time Series
MS	5103	Managerial Economics
MS	5105	Econometrics
MS	5111	Derivatives and Financial Risk
MS	5115	Operations and Mathematical
		Modeling
MS	5134	Behavioral Finance
MS	5206	Modern Financial Applications
MS	5215	Corporate Finance
MS	5217	Corporate Finance Planning and
		Decisions
MS	5218	Financial Markets
MS	5237	Business Finance and Decision Making
MS	5414	Applied Econometrics
MS	5421	Capital Asset Pricing Model
MS	5425	Empirical Asset Pricing
MS	5317	Seminars in Finance

Marketing

- MS 5249 Advanced Marketing Strategies
- MS 5301 Seminars in Marketing
- MS 5422 Distribution and Channel Management
- MS 5424 Strategic Brand Management

Human Resource Management

- MS 5101 Change Management
- MS 5102 Organizational Development MS 5202 Organizational Strategies and Effectiveness

- MS 5203 Global Corporate Strategy
- MS 5205 International Business Management
- MS 5211 Creative Leadership
- MS 5216 Corporate Governance
- MS 5225 Leadership and Motivation Techniques
- MS 5229 Negotiations and Conflict Resolution
- MS 5241 Public Administration and Governance
- MS 5245 System Thinking and Organizational Learning
- MS 5303 Issues in Strategic Management
- MS 5415 NGO Management
- MS 5423 Global Governance and Development
- MS 5xxx Seminars in HRM

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) OR thesis without completing six compulsory courses.

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. A student can take maximum two interdisciplinary elective courses in SS/CS/IT/Me-dia/MBA program with the prior approval of respective program managers.

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PhD Management Science

For PhD Program, Students are required to complete 48 credit hours. Five courses of 3 credit hours each, one Independent Research Study of 3 Credit Hours and One dissertation of 30 credit hours are required. Following are the important points for PhD in Management Sciences.

- There are two compulsory courses in PhD i.e. Advanced Research Methods and Techniques and Advanced Quantitative Tools for Research.
- Students cannot register in IRS before completing all compulsory courses.
- Candidate may be given prerequisite/deficiency courses or theses which will be decided by the Interview Board at the time of admission.
- Prerequisite Courses are non-credit courses.
- The student will not be allowed to register in PhD courses before completing prerequisite courses/thesis if any.
- Dissertation of 30 Credit Hours is Compulsory.
- Registration in Dissertation is allowed after passing Comprehensive Examination, GAT- Subject Test and maintaining minimum CGPA requirement.
 - All the requirements of HEC pertaining to PhD must be fulfilled these are;
 - Passing GAT Subject with minimum 60% at the time of Admission,
 - Maintaining minimum CGPA requirement for each course and for entire program.
 - Passing Comprehensive examination to establish the PhD candidacy (maximum 2 attempts allowed).
 - Publishing one Research Paper from the thesis in W,X, and Y-category journal before the completion of 30 Credit Hours Dissertation.
- Elective Courses to be selected from the specialized area of Marketing, Finance and Human Resource Management.
- Maximum Course Load for each Semester is 9 Credit Hours.
- Time duration for PhD is Minimum 3 years and Maximum 8 years.
- All General guidelines mentioned in DOCTORAL DEGREE PROGRAMS are applicable on PhD-Management Science.

First Year

Fall Semester

MS 6106 Advanced Research Methods and Techniques MS 6216 Advanced Quantitative Tools for Research MS 6xxx Elective I

Spring Semester

MS 6xxx Elective II MS 6xxx Elective III MS 6xxx Independent Research Study

Second Year

Fall Semester MS 6xxx Dissertation (Proposal in One or Two Semester)

Spring Semester

MS 6xxx Dissertation

Third Year

Fall Semester MS 6xxx Dissertation

Spring Semester MS 6xxx Dissertation

ELECTIVES

Finance

- MS 6111 Business Finance and Decision Making
- MS 6113 Applied Econometrics
- MS 6202 Econometrics
- MS 6315 Capital Asset Pricing Model
- MS 6317 Empirical Asset Pricing
- MS 6318 Financial Markets
- MS 6319 Modern Financial Applications
- MS 6322 Behavioral Finance
- MS 6323 Corporate Finance
- MS 6411 Financial Time Series
- MS 6418 Operations and Mathematical Modeling
- MS 6421 Corporate Finance Planning and Decision
- MS 6422 Derivatives and Financial Risk



MS 6423	Managerial Economics
MS 6325	Seminars in Finance
MS 6xxx	Strategic Finance

Marketing

- MS 6204 Strategic Marketing Decisions
- MS 6215 Seminars in Marketing
- MS 6312 Advanced Marketing Strategy
- MS 6316 Distribution and Channel Management
- MS 6415 Strategic Brand Management

Human Resource Management

- MS 6112 Strategic Human Resource Development
- MS 6114 NGO Management
- MS 6201 Change Management
- MS 6205 Public Administration and Governance
- MS 6211 Organizational Development
- MS 6311 Corporate Governance
- MS 6314 Global Corporate Strategy
- MS 6321 Organizational Strategies and Effectiveness
- MS 6324 Issues in Strategic Management
- MS 6412 Creative Leadership
- MS 6413 International Business Management
- MS 6414 Global Governance and Development
- MS 6416 Negotiations and Conflict Resolution
- MS 6417 Leadership and Motivation Techniques
- MS 6419 System Thinking and Organizational Learning
- MS 6424 Strategic Management
- MS 6xxx Seminars in HRM

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.

Course registration is subjected to course offering as per Zabdesk each semester. The above course plan is tentative for basic understanding. Students can register in any number of offered course/s but not exceeding 3 courses (9 credit hours) per semester. One extra course can be allowed depending on the approval of program manager. Summer is not a regular semester and no fresh registration is offered during Summer. A student can take maximum two interdisciplinary elective courses in SS/CS/IT/Media/MBA program with the prior approval of respective program managers.









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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 rudimentary education in Computer Science. 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, security, mobile computing 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.

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 six years.

BS (Computer Science) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.H	[rs.	Pre-Req.
		First Year			
		Fall Semester			
	CSC 1108	Introduction to Computer Science	2, 0	2	
	CSCL 1108	Lab : Introduction to Computer Science	0, 1	1	
	CSC 1103	Fundamentals of Programming	3, 0	3	
	CSCL 1103	Lab : Fundamentals of Programming	0, 1	1	
	CSC 1102	English Composition and Comprehension	3, 0	3	
	CSC 1101	Calculus and Analytical Geometry	3, 0	3	
	CSC 1107	Applied Physics	2, 0	2	
	CSCL 1107	Lab : Applied Physics	0, 1	1	
			16		
		Spring Semester			
	CSC 2103	Digital Logic Design	3, 0	3	CSC 1204
	CSCL 2103	Lab: Digital Logic Design	0, 1	1	
	CSC 1208	Object Oriented Programming Techniques	3, 0	3	CSC 1103
	CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	1	
	CSC 2101	Communication and Presentation Skills	3, 0	3	CSC 1102
	CSC 2105	Statistics and Probability	3, 0	3	
CSC xxxx University Elective-1		University Elective-1	3, 0	3	
			17		
		Second Year			
		Fall Semester			
	CSC 2201	Computer Organization and Assembly Language	3, 0	3	
	CSCL 2201	Lab: Computer Organization and Assembly Language	0, 1	1	
	CSC 2102	Data Structures and Algorithms	3, 0	3	CSC 1203
	CSCL 2102	Lab: Data Structures and Algorithms	0, 1	1	
	CSC 1201	Discrete Mathematical Structures	3, 0	3	
	CSC 4102	Professional Practices	3, 0	3	
	CSC xxxx	CS Supporting-1	3, 0	3	
			17		
		Spring Semester			
	CSC 3202	Design and Analysis of Algorithms	3, 0	3	CSC 2102
	CSC 2204	Finite Automata Theory and Formal Languages	3, 0	3	
	CSC 2203	Database Systems	3, 0	3	CSC 2102
	CSCL 2203	Lab: Database Systems	0, 1	1	
	CSC 2206	Linear Algebra	3, 0	3	
	CSC xxxx	University Elective-2	3, 0	3	
			16		

		Third Year			
		Fall Semester			
CSC 32	201	Compiler Construction	3, 0	3	CSC 2204
CSC xx	xxx	CS Supporting-2	3, 0	3	
CSC 22	205	Operating Systems	3, 0	3	CSC 2102
CSCL 2	2205	Lab: Operating Systems	0, 1	1	
CSC 31	109	Software Engineering	3, 0	3	
CSC xx	xxx	CS Supporting-3	3, 0	3	
·		· · ·	16		
		Spring Semester			
CSC 41	101	Artificial Intelligence	3, 0	3	CSC 1201
CSCL 4	4101	Lab: Artificial Intelligence	0, 1	1	
CSC 32	205	Computer Networks and Data Communications	3, 0	3	
CSCL	3205	Lab: Computer Networks and Data Communications	0, 1	1	
CSC 4>	xxx	CS Elective-1	3, 0	3	
CSC 4>	xxx	CS Elective-2	3, 0	3	
CSC 12	205	Technical and Business Writing	3, 0	3	
			17		
		Fourth Year			
		Fall Semester			
CSC 4x	xxx	CS Elective-3	3, 0	3	
CSC 4x	xxx	CS Elective-4	3, 0	3	
CSC 41	105	Final Year Project-I	0, 3	3	
CSC xx	xxx	University Elective-3	3, 0	3	
CSC 41	106	Parallel and Distributed Computing	3, 0	3	CSC 2205
			15		
		Spring Semester			
CSC 4x	xxx	CS Elective-5	3, 0	3	
CSC xx	xxx	University Elective-4	3, 0	3	
CSC 42	205	Final Year Project-II	0, 3	3	
CSC 42	201	Information Security	3, 0	3	
CSC 42	202	Pakistan and Islamic Studies/Humanities	4,0	4	
			16		
			130		

**A CSC xxxx Mathematics deficiency course will be offered to those students who have limited mathematical background (if deemed necessary by relevant PM/HOD).

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CS ELECTIVES

CSC 4802	Android Application Development
	Applied Data Mining
	Auditing Information Systems
CSC 4804	Business Process Re-engineering
	Control Systems
	Data and Network Security
CSC 4504	Organizational Behavior
CSC 4604	Research Report
CSC 4505	Systems Administration
CSC 4807	Embedded Programming
CSC 4708	Enterprise Resource Planning
CSC 4808	
CSC 4709	Internet Business Models
CSC 4809	iOS Development
CSC 4712	IT Innovations
CSC 4713	Managing Data-Center Projects
CSC 4812	Mechatronics
CSC 4813	Modeling and Simulation
CSC 4714	- · · · · · · · · · · · · · · · · · · ·
CSC 4815	0 0
CSC 4814) 0
CSC 4716	0 0
CSC 4816	
CSC 4717	
CSC 4817	
CSC 4718	Wireless and Mobile Technologies
CSC xxxx	Interaction Design
CSC 4719	Game Development
CSC 4721	
CSC xxxx	Software Engineering Economics
	Data Sciences
	Embedded Systems
CSC xxxx	Computer Graphics

UNIVERSITY ELECTIVES

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

CSC 4501 Business and Technology Ethics CSC xxxx Psychology CSC 4605 Sociology 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

COMPUTER SCIENCE SUPPORTING COURSES

Coverage of relevant pre-requisite will be ensured while allowing any of the following courses from this category:

CSC xxxx Differential Equations CSC xxxx Multi-variate Calculus CSC xxxx Graph Theory CSC xxxx Theory of Programming Languages

CSC xxxx Numerical Computing

DISTRIBUTION OF CREDIT HOURS

Course Group		Cr. Hrs.	%
Computing	Core Courses	39	30%
	Supporting Areas	12	9%
	General Education	19	15%
Computer Science	Core Courses	24	18%
	Electives	15	12%
	Supporting Courses	9	7%
University Electives		12	9%
	Total	130	100%

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.



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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 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. Although the institutional administration emphasize and encourage students to undertake Research, they can take two courses in lieu of Research in specific domains. If student opts for course work only, he/she is required to complete 11 courses of 3 credit hours each. Else, the student is required to complete 9 Courses (27 credit hours) and Two Independent Research Study (6 credit hours) OR One Thesis (6 credit hours).

The maximum time limit to complete the MS degree is 4 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 (from CS Stream-I)

Second Year

Third Semester

CSC 5xxx Thesis/Independent Research Study-I 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/Independent Research Study-II 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 (from SE Stream-I)

Second Year

Third Semester

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

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 (from N&S Stream-I)

Second Year

Third Semester

Thesis/Independent Research
Study I OR Course Work (from
CS Stream-II or from
N&S-Stream-II)
Elective-II (from N&S-Stream-I)
Elective-III (from N&S-Stream-I)

Fourth Semester

earch
k (from
tream-I)

CS-Stream-I

CSC 5xxx	Real-Time Systems
CSC 5xxx	Digital Image Processing
CSC 5xxx	Machine Learning
CSC 5xxx	Data Mining
CSC xxxx	Operation Research
CSC xxxx	Expert System

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
NSC 5xxx	Wireless Sensor Networks

N&S-Stream-II

NSC 5xxxTelecom Policies and RegulationsNSC 5xxxMobile Ad-hoc NetworksNSC 5xxxAdvanced Data Communications

Pre-Requisites:

- For any advanced course, pre-requisite course must have been taken 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.

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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 Research Study. Dissertation of 30 credits is also required to complete. The maximum time limit to complete the PhD degree is 8 years.

First Year

Fall Semester

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

Spring Semester

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

Second Year

Fall Semester CSC 6xxx Dissertation

Spring Semester CSC 6xxx Dissertation

Third Year

Fall SemesterCSC 6xxxDissertation

Spring Semester CSC 6xxx Dissertation

Elective courses are listed under different streams in MS Computer Science program.

Followed by successfull completion of the course work, Comprehensive Examination is required to pass in order 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 BASR).

*The course of Research Methodology is compulsory if not done in Masters.









FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Department of Mechatronic Engineering

Mechatronic Engineering

Mechatronics is a multidisciplinary field of engineering. It refers to an 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 Mechatronics. 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.

BE Mechatronic Engineering

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 competent mechatronic engineers who are knowledgeable, skillful and able to solve complex engineering problems.
- Have inclination towards research and lifelong learning and be able to promote entrepreneurial ideas.
- Be effective engineers with leadership qualities and high morals & professional ethics.

First Year

Fall Semester

ME 1101	Communication and Presentation Skills (2, 0)
ME 1111	Electric Circuits (2, 1)
ME 1104	Engineering Mathematics-I: Calculus
	and Analytical Geometry (3, 0)
ME 1106	Islamic Studies (2, 0)
ME 1109	Engineering Drawing-I (0, 2)
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 1204	Engineering Statics (3, 0)

- ME 1204 Engineering Statics (3, 0) ME 1207 Engineering Workshop (0, 2)
- ME 2301 Computer Programming (2, 1)
- ME 2306 Pakistan Studies (2, 0)

Second Year

Fall Semester

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 2311	Network Analysis (2, 0)
ME 2307	Data Structures and Object Oriented
	Programming (2, 1)
ME 2309	Engineering Drawing-II (0, 1)
ME 2xxx	Social Sciences Elective (2, 0)

Spring Semester

ME 2401	Electronics Circuit Design (3, 1)
ME 2403	Engineering Mathematics-IV:
	Transformation Techniques (3, 0)
ME 2405	Thermodynamics (2, 1)
ME 2406	Strength of Materials (3, 1)
ME 2407	Actuating Systems (3, 1)
ME 2408	Signals and Systems (2, 0)
ME 3607	Solid Modeling (0, 1)
	-

Third Year

Fall Semester

ME 3501	Engineering Mathematics–V:
	Numerical Methods (3, 0)
ME 3502	Fluid Mechanics (3, 1)
ME 3509	Microprocessor and Microcontroller
	Based Systems (2, 1)
ME 3506	Materials and Manufacturing
	Processes (3, 0)
ME 3507	Theory of Machines (2, 1)
ME 3508	Instrumentation and
	Measurements (3, 1)

Spring Semester

ME 3602	Control Systems (3, 1)
ME 3603	Engineering Mathematics-VI:
	Probability and Statistics (3, 0)
ME 3604	Machine Design (3, 0)
ME 3605	Power Electronics (3, 1)
ME 4705	Mechatronics System Design (3, 1)
ME 1205	Technical Writing Skills (2, 0)

Fourth Year

Fall Semester

ME 4xxx	Engineering Elective-I (3, 0)
ME 4702	Engineering Economics and Project
	Management (3, 0)
ME 4707	Mechanical Vibration (2, 0)
ME 4708	Final Year Project*-I (0, 3)
ME 4701	Fundamentals of Thermal Sciences (3, 1)
ME 4802	Robotics (3, 1)

Spring Semester

- ME 4706 Professional Practices (2, 0)
- ME 4xxx Engineering Elective-II (3, 0)
- ME 4xxx Management Sciences Elective (3, 0)
- ME 4808 Final Year Project-II (0, 3)
- ME 4807 Manufacturing Automation (2, 1)

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

Electives

Engineering Electives

Engineerii	ng Electives
ME 4722	Digital Signal Processing
ME 4723	Simulation and Modeling
ME 4821	Digital Image Processing
ME 4727	Digital Control Systems
ME 4826	Embedded Systems
ME 4721	Artificial Intelligence and Computer
Vision	~ *

ME 4xxx Applied Thermodynamics

Management Sciences Electives

- ME 4823 Engineering Management
- ME 4724 Entrepreneurship
- ME 4xxx Total Quality Management
- ME 4725 Leadership and Motivation Techniques Or any other relevant course

Social Sciences Electives

ME 2xxx	Organizational Behavior
ME 2xxx	Psychology
ME 2xxx	Sociology
ME 2xxx	Foreign Languages
	Or any other relevant course

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.

Community Service Learning Course

A non-credited community service learning course (1,1) will be offered in Summer at the end of 2nd year. This course aims to impart general awareness and knowledge along with social guidance to develop students into socially active citizens.

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.





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MS Mechatronic Engineering

Program Objectives

The broad objectives of the Master's program in Mechatronic Engineering are to instill in its students a solid foundation of mathematical, scientific and engineering knowledge in addition to developing the intellectual skills essential for prosperity and success in their careers. The program is structured in such a manner that the students are provided a firm theoretical foundation with opportunity to strengthen their knowledge through research assignments, practical training and projects. The objectives of Masters in Mechatronics Engineering program are to:

- Enable students to pursue a rigorous post doctorate/research program in Mechatronics Engineering.
- Improve the marketability of our students in the local industry, public sector and R&D Organizations.
- Provide technical confidence and financial guidance needed to start a small-scale industry to graduates interested in self-employment.

Roadmap

First Year

Fall Semester

- ME 5102 Advanced Robotics (3, 0)
- ME 5101 Advanced Embedded Systems (3, 0)
- ME 5105 Research Methodology (3, 0)

Spring Semester

ME 5202 Image Processing for Intelligent Systems (3, 0) ME 5201 Data Acquisition and Control (3, 0) ME xxxx Elective-I (3, 0)

Second Year

Fall Semester

ME xxxx Elective-II (3, 0) ME xxxx Elective-III (3, 0)

Spring Semester

(If students opt for research work based degree) ME xxxx Thesis (0, 6)

(If students opt for coursework based degree)

ME xxxx Elective-IV (3, 0) ME xxxx Elective-V (3, 0)

Electives

Robotics and Industrial automationME xxxxMobile RoboticsME xxxxCognitive Robotics

ME xxxx Machine Vision ME xxxx Advanced Manufacturing Design

- ME xxxx Techniques
- ME xxxx Adaptive Control
- ME xxxx Precision Manufacturing Systems
- ME xxxx Optimization of Engineering Systems
- ME xxxx Computer Integrated Manufacturing
- ME xxxx Micro-Manufacturing Systems
- and Technology
- ME xxxx Rapid Prototyping, Tooling and Automation
- ME xxxx Linear Control Systems
- ME xxxx Industrial Control Technology

Smart Electromechanical Systems

- ME xxxx Micro-Electro Mechanical Systems
- ME xxxx Advanced Modeling and Simulation
- ME xxxx Programming of Embedded Systems
- ME xxxx Linear Control Systems
- ME xxxx Artificial Intelligence
- ME xxxx Sensor and Sensing Technology
- ME xxxx Optomechatronic Systems
- ME xxxx Smart Materials and Structures
- ME xxxx Pattern Recognition and Analysis
- ME xxxx Digital Integrated Circuit Design

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



SZABIST prepares students for managerial careers in Social Science. 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 Educational Leadership.

To obtain a BS degree in Social Sciences, students are required to complete a total of 144 credit hours within 6 years. The degree consists of a total of 46 courses and a Research Project.

Fall Semester

SS 1117	Computer and Web Skills	
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SS 1116 **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

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

Fall Semester

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

Spring Semester

- SS 2406 Gender Studies
- SS 2418 Statistical Inferences
- SS 2414 Introduction to Organizational Psychology
- SS 3503 **Development Studies**
- Social Policy SS 1209
- SS 1xxx Elective-II

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

Fall Semester

SS 2411	Environmental 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
- SS 1254 World History
- SS 1262 Mass Media
- SS 1163 **Development and Politics**
- SS 1263 Culture and Media in Sindh
- SS xxxx History of Ideas

MAJORS

Psychology

SS 4111	Abnormal Psychology
SS 4112	Developmental Psychology

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- SS 4134Cognitive PsychologySS 4135Educational PsychologySS 4234Psychodynamics
- SS 4268 History of Psychology
- SS 4167 Child Psychology
- SS 4156 Clinical Psychology SS 4114 Personality Theories
- SS 4114 Personality Theories SS 4255 Counseling and Psych
- 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 4291
- 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
- SS 4197 The Sociology of Religion

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

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 Archaeology of Sindh SS 4285 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 Philosophy of Sindh SS 4189 SS 4192 Sindh's Sociology-I: Education and Language Policy Sindh's Sociology-II: Social Structures SS 4193 and Development SS 4194 Sindh's Sociology-III: Health, Gender, and Feminism SS 4293 The Sindhi Diaspora Sindh's Geopolitical Exigencies SS 4191 Sindh's Botanical and Zoological Heritage

Economics

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

All courses may not necessarily be offered in 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.

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MS (International Relations , Economics , Psychology and Sociology)

There are two streams available for MS (International Relations, Economics, Psychology and Sociology). One Stream is Course Work Based Stream and other one is Research based Stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 Credit Hours) and Two IRS (6 Credit Hours) OR One Thesis (6 Credit Hours). In both the streams, 30 Credit hours to be completed. The time limit to earn a MS degree is from 1.5 to 4 years. The detail of two streams is as follows:

1- MS (Course Based Stream)

The scheme of study is as follows:

- 02 core courses (6 Credit Hours)
- 08 Electives (24 Credit Hours)
- No IRS or 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 5xxx Elective-III
- SS 5xxx Elective-IV
- SS 5xxx Elective-V
- SS 5xxx Elective-VI

Second Year

Fall Semester

SS 5xxx Elective-VII SS 5xxx Elective-VIII

* Electives (Electives in any of the following specializations)

- International Relations
- Economics
- Psychology
- Sociology

2- MS (Research Based Stream)

The scheme of study is as follows:

- 02 core courses (6 Credit Hours)
- 06 Electives (18 Credit Hours)
- 02 IRSs or Thesis (6 Credit Hours)

PROSPECTUS 2018

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 5xxx Elective-III
- SS 5xxx Elective-IV
- SS 5xxx Elective-V
- SS 5xxx Elective-VI

Second Year

Fall Semester

SS 5xxx Independent Research Study (I & II) OR SS 5xxx Thesis (Part I)

Spring Semester

SS 5xxx Thesis (Part II)

- * Electives (Electives in any of the following specializations)
- International Relations
- Economics
- Psychology
- Sociology



ELECTIVES

MS (International Relations)

- SS 5xxx Dynamics of Security SS 5xxx Globalization in the 21st Century: Challenges and Opportunities SS 5xxx Role of Great Powers and International Relations SS 5xxx Critical Geo-Politics
- SS 5104 Politics of Geo-Economics
- SS 5111 Democratization as a Global Process
- SS 5212 NGO Management
- SS 5306 Sacred and Secular
- SS 5311 Environmental Studies
- SS 5312 Globalization and Developing Countries
- SS 5313 Intellectual Property Rights and Laws
- SS 5226 Issues in Pakistan's Political and Constitutional History
- SS 5321 History of Ideas
- SS 5206 Political Economy in the Global Perspective
- SS 5402 Law and Human Rights
- SS 5xxx Globalization: Issues and Debates
- SS 5xxx Political Theory
- SS 5xxx History of Economic Thought in Contemporary Perspective

MS (Economics)

- SS 5xxx International Trade
- SS 5xxx Economic Growth and Development
- SS 5xxx Monetary Economics
- SS 5xxx Public Finance
- SS 5xxx Globalization in the 21st Century: Challenges and Opportunities
- SS 5223 Financial Time Series
- SS 5104 Politics of Geo-Economics
- SS 5305 Political Economy of Pakistan
- SS 5214 Public Policy Management
- SS 5322 Topics in Political Economy
- SS 5206 Political Economy in the Global Perspective SS 5327 Development Economics and Sustainability
- SS 5312 Globalization and Developing Countries
- SS 5321 History of Ideas
- SS 5228 Corporate Governance
- SS 5xxx Advanced Microeconomics
- SS 5xxx Advanced Macroeconomics
- SS 5xxx Advanced Econometrics
- SS 5xxx History of Economic Thought in **Contemporary Perspective**

MS (Sociology)

- SS 5xxx Sociology of Development
- SS 5xxx Population Dynamics
- SS 5xxx Social Statistics
- SS 5xxx Cultural Anthropology

- SS 5212 NGO Management
- SS 5xxx Gender and Human Rights
- SS 5402 Law and Human Rights
- SS 5xxx Community Development and Social Mobilization
- SS 5xxx Gender Issues in Global Scenario
- SS 5xxx Sociology of Gender Issues
- SS 5xxx Gender, Work and Economy
- SS 5xxx Women Studies
- SS 5xxx Gender Issues in Rural Development
- SS 5306 Sacred and Secular
- SS 5xxx Sociology of Sexuality
- SS 5xxx Globalization: Issues and Debates
- SS 5xxx Global Governance
- SS 5xxx Sociology of Science, Knowledge and Technology
- SS 5xxx Industrial Sociology
- SS 5xxx Immigration in Contemporary Perspectives
- SS 5xxx Sociology of Migration and Urbanization
- SS 5302 Sustainable Development
- SS 5xxx Social Change and Development
- SS 5xxx Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality and Growth in 21 Century
- SS 5xxx Community Organizing and Development
- SS 5xxx Religion and Development
- SS 5xxx Population and Development: Current Issues and Future Implications

MS (Psychology)

- SS 5xxx Applications of Contemporary Data Analysis Tools
- SS 5xxx Use, Construction
- SS 5xxx Interpretation of Tests
- SS 5xxx School Psychology
- SS 5xxx Cross-Cultural Psychology
- SS 5xxx Community Psychology
- SS 5xxx Environmental Psychology
- SS 5xxx Gender Psychology
- SS 5xxx Consumer Behavior
- SS 5xxx Perspective in Organizational Psychology
- SS 5xxx Psychological Assessment in
- Organizational Psychology
- SS 5xxx Psychology of Leadership
- SS 5xxx Organizational Culture and Development
- SS 5xxx Marketing and Consumer Psychology
- SS 5xxx Organizational Conflict and Management
- SS 5xxx Assessment and Diagnosis-I
- SS 5xxx Assessment and Diagnosis-II
- SS 5xxx Psychotherapy and Counseling-I
- SS 5xxx Psychotherapy and Counseling-II
- SS 5xxx Psychophysiology and Psychopharmacology
- SS 5xxx Clinical Internship
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PhD (International Relations, Economics, Sociology and Psychology)

For PhD Program, Students are required to complete 48 credit hours. 5 courses of 3 credit hours each and one Independent Research Study of 3 Credit Hours (total 18 Credit hours for Course Work) and One dissertation of 30 credit hours (Total 48 Credit Hours for PhD).

- There are two compulsory courses in PhD i.e. Advanced Research Methods and Techniques (Qualitative) Advanced Research Methods and Techniques (Quantitative).
- Students cannot register in IRS before completing compulsory courses.
- Candidate may be given prerequisite/deficiency courses or theses which will be decided by the Interview Board at the time of admission.
- Prerequisite Courses are non-credit courses.
- Dissertation of 30 Credit Hours is Compulsory.
- Registration in Dissertation is allowed after passing Comprehensive Examination, GAT- Subject Test and maintaining minimum CGPA requirement.
- All the requirements of HEC pertaining to PhD must be fulfilled these are:
 - Minimum 60% GAT Subject at the time of Admission,
 - CGPA requirement (3.00 GPA/CGPA minimum pass requirement for each course and for CGPA.
 - Passing Comprehensive examination to establish the PhD candidacy (maximum 2 attempts allowed).
 - One Research Paper Published from the thesis in Y-category journal before the completion of 30 Credit Hours Dissertation.
- Elective Courses to be selected from the specialized area of International Relations, Economics, Psychology and Sociology.
- Maximum Course Load for each Semester is 9 Credit Hours.
- Time duration for PhD is Minimum 3 years and Maximum 8 years.
- All General guidelines mentioned in DOCTORAL DEGREE PROGRAMS are applicable on PhD- Social Sciences.

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 5xxx Elective-II SS 5xxx Elective-III SS 6xxx Independent Research Study

Second Year

Fall Semester SS 6x09 Dissertation

Spring Semester SS 6x09 Dissertation

ELECTIVES

PhD (International Relations) SS 5xxx Dynamics of Security

- SS 5xxx Globalization in the 21st Century: Challenges and Opportunities
- SS 5xxx Role of Great Powers and International Relations
- SS 5xxx Critical Geo-Politics
- SS 5104 Politics of Geo-Economics
- SS 5111 Democratization as a Global Process
- SS 5212 NGO Management
- SS 5306 Sacred and Secular
- SS 5311 Environmental Studies
- SS 5312 Globalization and Developing Countries
- SS 5313 Intellectual Property Rights and Laws
- SS 5226 Issues in Pakistan's Political and Constitutional History
- SS 5321 History of Ideas
- SS 5206 Political Economy in the Global Perspective

- SS 5402 Law and Human Rights
- SS 5xxx Globalization: Issues and Debates
- SS 5xxx Political Theory
- SS 5xxx History of Economic Thought in Contemporary Perspective

PROSPECTUS 2018

PhD (Economics)

SS 5xxx International Trade SS 5xxx Economic Growth and Development SS 5xxx Monetary Economics SS 5xxx Public Finance SS 5xxx Globalization in the 21st Century: Challenges and Opportunities SS 5223 Financial Time Series SS 5104 Politics of Geo-Economics SS 5305 Political Economy of Pakistan SS 5214 Public Policy Management SS 5322 Topics in Political Economy SS 5206 Political Economy in the Global Perspective SS 5327 Development Economics and Sustainability SS 5xxx Organizational Culture & Development SS 5xxx Marketing and Consumer Psychology SS 5xxx Organizational Conflict and Management SS 5xxx Assessment and Diagnosis-I SS 5xxx Assessment and Diagnosis-II SS 5xxx Psychotherapy and Counseling-I SS 5xxx Psychotherapy and Counseling-II SS 5xxx Psychophysiology and Psychopharmacology SS 5xxx Clinical Internship SS 5xxx History of Economic Thought in **Contemporary Perspective**

*ARMT-I and ARMT-II are mandatory courses

- SS 5312 Globalization and Developing Countries
- SS 5321 History of Ideas
- SS 5228 Corporate Governance
- SS 5xxx Advanced Microeconomics
- SS 5xxx Advanced Macroeconomics
- SS 5xxx Advanced Econometrics

PhD (Sociology)

- SS 5xxx Sociology of Development
 SS 5xxx Population Dynamics
 SS 5xxx Social Statistics
 SS 5xxx Cultural Anthropology
 SS 5212 NGO Management
 SS 5xxx Gender and Human Rights
 SS 5402 Law and Human Rights
 SS 5xxx Community Development and Social Mobilization
 SS 5xxx Gender Issues in Global Scenario
 SS 5xxx Gender, Work and Economy
 SS 5xxx Women Studies
- SS 5xxx Gender Issues in Rural Development

- SS 5xxx Sociology of Sexuality
- SS 5xxx Globalization: Issues and Debates
- SS 5xxx Global Governance
- SS 5xxx Sociology of Science, Knowledge and Technology
- SS 5xxx Industrial Sociology
- SS 5xxx Immigration in Contemporary Perspectives
- SS 5xxx Sociology of Migration and Urbanization
- SS 5302 Sustainable Development
- SS 5xxx Social Change and Development
- SS 5xxx Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality and Growth in 21 Century
- SS 5xxx Community Organizing and Development
- SS 5xxx Religion and Development
- SS 5xxx Population and Development: Current Issues and Future Implications

PhD (Psychology)

- SS 5xxx Applications of Contemporary Data Analysis Tools
- SS 5xxx Use, Construction
- SS 5xxx Interpretation of Tests
- SS 5xxx School Psychology
- SS 5xxx Cross-Cultural Psychology
- SS 5xxx Community Psychology
- SS 5xxx Environmental Psychology
- SS 5xxx Gender Psychology
- SS 5xxx Consumer Behavior
- SS 5xxx Perspective in Organizational Psychology
- SS 5xxx Psychological Assessment in
- Organizational Psychology
- SS 5xxx Psychology of Leadership



DEPARTMENT OF EDUCATION

The Department of Education at SZABIST is committed to improve the quality of education in Pakistan. The institute prepares its students for leadership roles in the field of education to meet the challenges of fast-changing global world without losing sight of the local context. The emphasis is on fostering a critical awareness about educational issues, the socio-politics of educational policies, curricular and pedagogical decisions and teacher education/faculty development problems. This is achieved through interactive teaching, intensive courses and rigorous research-based assignments and practicum.

Program

The Education programs at the Department of Education are designed to meet national and international standards of educational study and research. They are in conformity with the HEC guidelines and cater 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 make informed decisions.

B.Ed (1.5 Years) Secondary

Program Description

The Bachelor of Education (B.ED, Secondary) 1.5 years program at SZABIST is intended to help pre-service and in-service teachers develop the required knowledge and skills to enter the educational sector as a competent and knowledgeable teacher with a grip on teaching different subjects in secondary grades in public and private sector. The proposed program has been specifically designed for students from non-educational background who want to now shift to serving and getting a degree in education. After the program completion, students will be eligible to apply for the MS/MPhil in Education.

Program Mission:

The Bachelor of Education (B.Ed) program strives to prepare thoughtful, knowledgeable, lifelong learners who have extensive knowledge about working with students of various age groups and who understand the inherent richness of educational endeavours. The program's mission is to help students' get familiar with research, understand the complexities of learning, human development, and sound pedagogical principles as well as develop grounding in content knowledge. The program's goal is to prepare graduates who are committed to supporting just, engaging, and successful communities of diverse learners.

First Year

Fall Semester

- BED 5105 Foundations of Education
- BED 5102 Educational Leadership and Management
- BED 5104 Effective Communication in Education
- BED 5103 Educational Psychology
- BED 5106 Testing and Evaluation
- BED 5101 Curriculum Design and Development

Spring Semester

BED 5201 Academic Content-I and Pedagogy
BED 5202 Academic Content-II and Pedagogy
BED 5203 Academic Content-III and Pedagogy
BED 5204 Academic Content-IV and Pedagogy
BED 5205 Research Methods and Techniques
BED 5206 School, Community and Teacher

Second Year

Fall Semester

BED 5304 ICT in EducationBED 5303 Educational Policy and PracticesBED 5305 Teaching PracticeBED 5302 Critical Thinking and Reflective Practices

- BED 5301 Classroom Management
- BED 5308 Research Project



SPECIFICATIONS OF DISCIPLINE

Group 1 : SCIENCE	Group 2: SOCIAL SCIENCES	Group 3: LANGUAGE & LITERATURE
Biology Chemistry Computer Science Mathematics Physics	Civics Economics Geography Islamic Studies Pakistan Studies Psychology Sociology	English Sindhi Urdu

COMPULSORY COURSES

- BED 5105Foundations of EducationBED 5102Educational Leadership and Management
- BED 5104 Effective Communication in Education
- BED 5103 Educational Psychology
- BED 5106 Testing and Evaluation
- BED 5101 Curriculum Design and Development
- BED 5205 Research Methods and Techniques
- BED 5304 ICT in Education
- BED 5303 Educational Policy and Practices

- BED 5302 Critical Thinking and Reflective Practices
- BED 5206 School, Community and Teacher
- BED 5301 Classroom Management
- BED 5305 Teaching Practice
- BED 5201 Academic Content-I and Pedagogy
- BED 5202 Academic Content-II and Pedagogy
- BED 5203 Academic Content-III and Pedagogy
- BED 5204 Academic Content-IV and Pedagogy
- BED 5308 Research Project















MA Education

Program Description

The Department of Education offers MA in Education to in-service and pre-service teachers who have completed 14 years of basic education. MA Education will offer three specializations in Teacher Education, Educational Leadership and Management and Early Childhood Education. The degree will focus on developing an effective teacher, with heavy emphasis on understanding teaching methods, educational leadership, and philosophy of education, early childhood education and holistic educational development. The program also meets contemporary national and international trends in the field of education and research and is in conformity with the HEC guidelines.

Program Mission:

The program envisages knowledge dissemination through critical analysis of theoretical principles in aspects of teacher education, educational leadership and management and early childhood education. It aims to provide teachers with a professional platform through which they can make informed decisions in the classrooms and emerge as competent practitioners. The program also aims to raise educational standards in the country through a thorough analysis of contemporary educational challenges at the national and international levels and proposes to deal with them through a fine blend of theory and practice.

First Year

Fall Semester

- EDU 5103 Foundations of Education
- EDU 5107 Educational Leadership and Management EDU 5105 Trends in Teacher Education EDU 5101 Classroom Management EDU 5102 Effective Communication in Education Spring Semester EDU 5305 Testing and Evaluation EDU 5302 Educational Psychology
- EDU 5202 Curriculum Design and Development
- EDU 5201 Critical Thinking and Reflective Practices
- EDU 5204 School, Community and Teacher
- Second Year

Fall Semester

- EDU 5401 ICT in Education
- EDU 5308 Academic Content-I and Pedagogy
- EDU 5303 Research Methods and Techniques
- EDU 5xxx Elective-I
- EDU 5309 Academic Content-II and Pedagogy
- EDU 5306 Educational Policy and Practices

Spring Semester

- EDU 5xxx Elective –II EDU 5xxx Elective- III
- EDU 5xxx Elective-III
- EDU 5403 Teaching Practice
- EDU 5xxx Thesis

COMPULSORY COURSES

- EDU 5103 Foundations of Education
- EDU 5107 Educational Leadership and Management

- EDU 5105 Trends in Teacher Education
- EDU 5101 Classroom Management
- EDU 5102 Effective Communication in Education
- EDU 5305 Testing and Evaluation
- EDU 5202 Curriculum Design and Development
- EDU 5201 Critical Thinking and Reflective Practices
- EDU 5204 School, Community and Teacher
 - EDU 5401 ICT in Education
 - EDU 5302 Educational Psychology
 - EDU 5303 Research Methods and Techniques
 - EDU 5306 Educational Policy and Practices
 - EDU 5403 Teaching Practice
 - EDU 5308 Academic Content-I and Pedagogy
 - EDU 5309 Academic Content-II and Pedagogy
 - EDU 5xxx Thesis

ELECTIVES

- EDU 5xxx Affective Education (TE)
- EDU 5xxx Guidance and Counselling in Education (TE)
- EDU 5xxx Education for Sustainable Development (TE)
- EDU 5xxx Gender and Education (TE)
- EDU 5xxx Human Development and Learning (ECE)
- EDU 5xxx Language and Literacy Experiences (ECE)
- EDU 5xxx Supportive and Safe Environment (ECE)
- EDU 5xxx Play and Enquiry Based Learning (ECE)
- EDU 5xxx Effective Change Management in Education (ELM)
- EDU 5xxx Organizational Development in Education (ELM)
- EDU 5xxx Human Resource Management (ELM)
- EDU 5xxx Entrepreneurship in Education (ELM)

Please note that there will be no internship or comprehensive exam in the MA Education program.

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MS Educational Leadership and Management

The MS in Educational Leadership and Management is a 1.5-2 years program. It is 30 credit hours program. There are two streams available for MS. One Stream is Course Work Based Stream and other one is Research Based Stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 Credit Hours) and Two IRS (6 Credit Hours)OR One Thesis (6 Credit Hours).In Both the streams, 30 Credit hours must be completed. The time limit to earn a MS degree is from 1.5 to 4 years.

The students will have the opportunity to specialize in the fields of Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, School Administration/Educational Leadership, Guidance & Counseling, Curriculum development, Technology Integration in Education.

The breakup of 30 credit hours is as follows:

- Four compulsory courses (12 credit hours)
- Four elective courses (12 credit hours)
- Thesis (6 credit hours) or 2 Independent Research Studies (3 credit hours each)

First Year

Fall Semester

ELM 5102	Advanced Research Methods and
	Techniques-I (Qualitative)
ELM 5103	Advanced Research Methods and
	Techniques-II (Quantitative)
ELM 5xxx	Elective-I
ELM 5xxx	Elective-II

Spring Semester

ELM 5201 Curriculum Development and Planning ELM 5101 Leadership and Management in Educational Contexts ELM 5xxx Elective-III ELM 5xxx Elective-IV

Second Year

Fall Semester

ELM 5xxx Thesis (6 credits)/2 Independent Research Studies (3 credit hours each)

COMPULSORY COURSES

,

ELECTIVES

	-
ELM 5xxx	Sociological Issues in Education
	/Access/Out comes and Quality
ELM 5xxx	Learning Effectiveness in Higher
	Education Contexts
ELM 5136	Use of Technology in Education
ELM 5xxx	Education in the Context of Conflict
ELM 5xxx	Socio-Politics of Language Policy in
	Educational Contexts
ELM 5133	Change Management in Education
ELM 5134	Educational Policy and Practice
ELM 5135	Assessment and Evaluation in Education
ELM 5xxx	School Evaluation and Monitoring
ELM 5131	Teacher Education
ELM 5xxx	Research Philosophy
ELM 5xxx	Professional Development and
	Management in Education
ELM 5xxx	Finance and Resource Management
ELM 5132	Organizational Development



PROSPECTUS 2018

PhD Educational Leadership and Management

The PhD in Educational Leadership and Management program at the Department 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, School Administration/ Educational Leadership, Guidance & Counseling, Educational Psychology, Curriculum development, Technology Integration in Education.

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

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 Politics
	in Educational Contexts
ELM 6123	Change Management in Education
ELM 6124	Educational Policy and Practice
ELM 6125	Assessment and Evaluation in
	Education
ELM 6xxx	School Evaluation and Monitoring
ELM 6121	Teacher Education
ELM 6xxx	Research Philosophy
ELM 6xxx	Professional Development and
	Management in Education
ELM 6xxx	Finance and Resource Management
ELM 6122	Organizational Development
	-

All the students are required 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 MEDIA SCIENCES

In the 21st century, Media in all its forms, print, TV, radio, film, video, digital, virtual, and mobile has 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.

EDIA SCIENCI

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

Bachelor of Science in Media Science

(Film & Television Production, Advertising Strategy & Design, and Journalism)

- Master of Advertising
- MS Media Studies

FACULTY OF MEDIA SCIENCES

Bachelor of Science in Media Science

The Faculty 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 enrol 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 in Film and Television production, or Advertising Strategy & Design, or Journalism and 3 open electives). All students must complete their degree within 6 years.

First Year

Fall Semester

- MD 1122 English for General Purposes
- MD 1107 Drawing and Perspective
- MD 1115 Introduction to Media Industries
- MD 1116 Civilization Studies-I
- MD 2402 Islamiat and Pakistan Studies/Humanities MD 4xxx
- 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 Theatre Project

Spring Semester

- MD 1118 Topics in Asian Literature
- MD 2318 History of Commercial Arts
- 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 3527Design Practices-IIMD 3525Radio Programming and ProductionMD 4xxxMajor-1

Spring Semester

MD 2405Media Laws and EthicsMD 4701State and Nation Building in PakistanMD 4xxxMajor-IIMD 4xxxMajor-IIIMD 4xxxMajor-IVMD 4xxxElective-I

Fourth Year

Fall Semester

MD 4714Producing Short NarrativesMD 3506Theories of Visual CulturesMD 4xxxMajor-VMD 4xxxMajor-VIMD 4xxxMajor-VIIMD 4xxxElective II

Spring Semester

MD 4807 Thesis-I MD 4xxx Elective-III

Summer Semester MD 4808 Thesis-II



roject Summer MD 4808

FACULTY OF MEDIA SCIENCES

MAJORS

Film & Te	levision Production
MD 4726	Directing I
MD 4728	Directing II
MD 4781	Sound Design
MD 4821	Cinematography
MD 4825	Screenwriting
MD 4872	Visual Storytelling
MD 4868	Production Practices III
MD 4724	Documentary Vision
MD 4764	Production Design
MD 4765	Basic Lighting
MD 4829	Screenwriting II
MD4789	Green Screen Keying and Composition
	for Production VFX
MD4889	Narrative and Social Change

Advertising Strategy & Design

- MD 4723 Advance Animation MD 4731 Advertising Research MD 4739 Advertising Design and Concepts MD 4754 Creative Aspects in Advertising MD 4779 Digital Brand Communication MD 4835 Consumer Behaviour MD 4843 Campaign Strategy MD 4846 New Media Advertising Copywriting MD 4847 MD 4736 Integrated Marketing Communication MD 4837 Media Planning MD 4782 Interaction Design MD 4787 Digital Design and Publishing MD 4834 Advertising in Pakistan
- MD 4833 Brand Management

Journalism

- MD 4757 Feature Writing I
- MD 4879 Multimedia Journalism
- MD 4864 Investigative Journalism and Crisis Reporting
- MD 4877 The International Newsroom
- MD 4783 TV Journalism
- MD 4859 Introduction to Photojournalism
- MD 4839 Reporting the News

ELECTIVES

- MD 4854 Illustration
- MD 4732 Typography
- MD 4867 Topics in Film and Television
- MD 4878 Design for Social Change
- MD 4886 Game Design
- MD 4883 Urdu Literature in South Asian Cinema

MD 4873	Modernity in Cinema in Bengal
MD 4774	Media Anthropology
MD 4776	Media Convergence and Innovation
MD 4888	Culture and Media in Sindh
MD 4792	Music Production and Design
MD 4892	Music Theory and Performance
MD 4788	Sindh Studies

Electives and majors will be offered depending on the availability of the resources.

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

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

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

Internship

The Faculty 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.



FACULTY OF MEDIA SCIENCES

Master of Advertising

The Faculty of Media Sciences at SZABIST offers an evening, 18 months Master's degree program in Advertising, providing students, a comprehensive training through courses that prepare them to engage in various career options in the advertising industry. To be awarded a Master of Advertising degree, students need to complete total of 30 credit hours (10 courses), which includes 5 core courses(15 credits hours), 3 electives (9 credit hours) and Research project I & II (6 credit hours).

First Year

Fall Semester

Fall Semester		
MD 5168	Research Methods in Advertising	
MD 5xxx	History of Communication and	
	Advertising	
MD 5xxx	Ideation Techniques in Advertising	
MD 5167	Principles of Advertising	
	* 0	

Spring Semester

MD 5xxx Creative Advertising Campaigns MD 5xxx Elective I MD 5xxx Elective II MD 5xxx Research Project I

Second Year

Fall Semester

MD 5xxx Research Project II MD 5xxx Elective III

MS Media Studies

Faculty of Media Sciences offers a two year MS in Media Sciences program. Students enrolling in this program will be offered to select any one of the 3 streams of specialization; General Entertainment Content – GEC primarily for media professionals already engaged in leading creative teams of their respective media houses and are interested in honing up their cognitive as well as computer generated information skills; Production stream is for students engaged in middle management cadre in production houses as part of their creative teams in varied capacities and are hampered in their careers because of lack of knowledge and understanding of production technique skills; Journalism stream is offered for all who want to develop an in depth understanding of journalistic practices and are interested in specializing in analytical skills related to both print and electronic media.

On the basis of the three streams offered, the sixth Core choices offered in 2nd semester (Spring) will determine the electives for the respective stream. In addition to the three specializations offered students are at liberty in choosing their path of academic research related to praxis; through course work, Independent Research Study (IRS) and Thesis (students who are interested in following an academic career leading to a doctorate). MS GAT/ HAT result of 50% is required for MSMD as per HEC requirements

In Spring Semester students decide their respective chosen stream; choice of Electives vary according to the three options offered to students. Specialization Streams Offered: General Entertainment Content (GEC); Production; Journalism.

To be awarded a MS Media Sciences degree, students need to complete total of 30 credit hours. Students can finish their degree program by pursuing one of the three available options:

ELECTIVES

MD 5351	Campaign Strategy
MD 5264	Copywriting and Advertising
	Conceptualization
MD 5265	Digital Advertising
MD 5xxx	Advanced Integrated Marketing
	Communication
MD 5352	New Media Advertising
MD 5xxx	Strategic Brand Management
MD 5269	Strategic Creative Development
MD 5353	Media Planning and Strategy
MD 5xxx	Consumer Engagement
MD 5xxx	Advertising Account Management

Electives will be offered depending on the availability of the resources.

FACULTY OF MEDIA SCIENCES

MS by Thesis

30 Credit hours (10 courses), which includes 6 core courses (18 credit hours), 2 electives (6 credits hours), Thesis I & Thesis II (6 credit hours)

MS by Independent Research

30 Credit hours (10 courses), which includes 6 core courses (18 credit hours), 2 electives (6 credit hours), IRS I & IRS II (6 credit hours)

MS by Course Work

30 Credit hours (10 courses), which includes 6 core courses (18 credit hours), 4 electives (12 credit hours)

All students must complete their degree within four years.

First Year

Fall Semester

- MD 5104 Research Methodology
- MD 5102 Media and Contemporary Culture
- MD 5113 Management Concepts in Media Industries

Spring Semester

- MD 5207 Media Evolution and Innovation
- MD 5201 Communication for Social Change
- MD 5213 Social and Cultural Impact of GEC Programming (for GEC stream majors only)
- MD 5xxx Production Design (for Production stream majors only)
- MD 5xxx Journalism Law and Ethics (for Journalism stream only)

Second Year

Fall Semester

- MD 5xxx Elective-I (Elective from selected Stream)
- MD 5xxx Elective-II (Elective from selected Stream)
- MD 5xxx Thesis I/MD 5xxx IRS I/MDxxx Course work (Elective from selected Stream)

Spring Semester

MD 5xxx Thesis II/MD 5xxx IRS II/MDxxx Course work (Elective from selected Stream)

ELECTIVES

GEC Stream:

MD 5xxx Advanced Content Research MD 5xxx Syndication – Foreign and

Indigenous Content

- MD 5xxx Story Telling and Screenplay Writing
- MD 5xxx Production Management
- MD 5xxx Directing
- MD 5xxx Format Shows and Reality Shows
- MD 5111 Media, Art and Technology
- MD 5xxx Theories of Visual Culture
- MD 5414 Theories of Communication Design

Production Stream:

- MD 5xxx Camera and Lights
- MD 5xxx Film Analysis
- MD 5xxx Story Telling and Screenplay Writing
- MD 5xxx Documentary Making
- MD 5xxx Directing
- MD 5xxx Aesthetics of Films
- MD 5211 Theories of Film and Television
- MD 5311 Urban Geographies and Visual Cultures

Journalism Stream:

- MD 5xxx Global Journalism
- MD 5xxx Beat Reporting
- MD 5xxx Investigative Journalism
- MD 5xxx Multi-Format News Reporting
- MD 5xxx Data Journalism
- MD 5xxx Fashion and Entertainment Journalism
- MD 5xxx Media and Post Colonialism
- MD 5314 Media, Politics, and Governance
- MD 5315 Issues in International Media

Electives will be offered depending on the availability of the resources.

PROSPECTUS 2018

FACULTY OF BIOSCIENCES

SZAR

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 skills and offers the opportunity to study a broad range of disciplines in biological and health 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, pharmaceutics, molecular biology, biochemistry and biotechnology.

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

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:

- Applied Microbiology and Immunology Lab
- Animal Cell Culture Lab
- Plant Cell and Tissue Culture Lab
- Applied Biochemistry and Enzymology Lab
- Natural Product Chemistry and
- Biotransformation Lab
- Biotechnology and Molecular Biology Lab
- General Biosciences Labs
- Green House

- 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 135 credit hours of teaching, 43 courses, an internship of at least six weeks, and a research project. The maximum time limit to complete the BS degree is six years.

Fall Semester

- BIO 1101 Cell Biology
- BIO 1111 English for General Purposes
- BIO 1107 Fundamental Mathematics
- BIO 2404 Lab Management
- BIO 1109 Chemistry

Spring Semester

BIO	1113	Microbiology-I
BIO	2301	Biochemistry-I
BIO	1211	English for Academic Purposes
BIO	1214	Sociology
BIO	1208	Statistics
BIO	1212	Islamic Studies/Ethics and
		Pakistan Studies
	BIO BIO BIO BIO	BIO 1113 BIO 2301 BIO 1211 BIO 1214 BIO 1208 BIO 1212

Fall Semester

BIO 1206 Physiology-I

- BIO 1213 Microbiology-II
- BIO 2411 English for Professional Purposes
- BIO 2401 Biochemistry-II
- BIO 1104 Introduction to Computing

Spring Semester

BIO 2305	Physiology-II
BIO 3504	Immunology



Molecular Biology BIO 4803 BIO 2409 Humanities BIO 3503 Genetics

Fall Semester

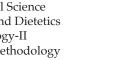
BIO 2406 Genetic Engineering BIO 3507 Biotechnology-I BIO 2405 Hematology BIO 4801 Bioethics BIO 3505 Pharmacology-I BIO 2306 Psychology

Spring Semester

BIO 2407 Basic Endocrinology BIO 3607 Biotechnology-II BIO 3601 Agricultural Science BIO 2304 Nutrition and Dietetics BIO 3605 Pharmacology-II BIO 4703 Research Methodology

Fall Semester

BIO 4701 Business Management BIO 4705 Research Report-I BIO 2309 Animal and Plant Tissue Culture **Bioinformatics** BIO 2402 BIO 4xxx Elective-I BIO 4xxx Elective-II





Spring Semester

BIO 2403	Environmental Science
BIO 4802	Biophysics
BIO 4805	Research Report-II
BIO 3509	Epidemiology
BIO 4xxx	Elective-III
BIO 4xxx	Elective-IV

ELECTIVES

Molecular Biology:

BIO 4721Advanced Biochemical TechniquesBIO 4722Medical TranscriptionBIO 4723VirologyBIO 4822Nanotechnology

BIO 4725Advanced Molecular TechniquesBIO 4726Applied Enzymology

BIO 4827 Systems Biology

Biotechnology:

- BIO 4721Advanced Biochemical TechniquesBIO 4724TelemedicineBIO 4823Stem Cell ResearchBIO 4727Food Biotechnology
- BIO 4825 Fermentation Biotechnology
- BIO 4726 Applied Enzymology
- BIO 4826 Medical Biotechnology
- BIO 4728 Techniques in Biotechnology

BS Biotechnology

BS Biotechnology at SZABIST is a four-year program spread over eight semesters and consists of 135 credit hours of teaching, 43 courses, an internship of at least six weeks, and a research project. The maximum time limit to complete the BS degree is six years.

First Year

Fall Semester

- BTC 1103 Cell Biology
- BTC 1105 English for General Purposes
- BTC 1101 Biomathematics
- BTC 1102 Biosafety and Biosecurity
- BTC 1104 Chemistry

Spring Semester

BTC 1204	Microbiology
BTC 1201	Biochemistry-I
BTC 1202	English for Academic Purposes
BTC 1206	Sociology
BTC 1205	Probability and Biostatistics
BTC 1203	Islamic Studies / Ethics
	and Pakistan Studies

Second Year

Fall Semester

- BTC 2303 English for Professional Purposes
- BTC 2305 Microbial Biotechnology
- BTC 2304 Introduction to Computer Science
- BTC 2301 Biochemistry-II
- BTC 2302 Ecology, Biodiversity and Evolution-I

Spring Semester

BTC 2402Ecology, Biodiversity and Evolution -IIBTC 2404ImmunologyBTC 2405Molecular BiologyBTC 2403HumanitiesBTC 2401Classical Genetics

Third Year

Fall Semester

- BTC 3505 Principles of Biochemical Engineering
- BTC 3504 Introduction to Biotechnology
- BTC 3503 Enzymology
- BTC 3501 Bioethics
- BTC 3506 Psychology
- BTC 3502 Business Management

Spring Semester

- BTC 3603 Industrial Biotechnology
- BTC 3601 Agriculture Biotechnology
- BTC 3605 Nutrition and Dietetics
- BTC 3602 Health Biotechnology
- BTC 3606 Research Methodology
- BTC 3604 Medical Biotechnology

Fourth Year

Fall Semester

BTC 4705	Research Report-I
	Animal and Plant Tissue Culture
BTC 4702	Bioinformatics
BTC 4xxx	Elective-I
BTC 4xxx	Elective-II
BTC 4703	Fermentation Biotechnology

Spring Semester

BTC 4801Biological physicsBTC 4805Research Report-IIBTC 4802Environmental BiotechnologyBTC 4803Food Biotechnology

BTC 4xxx Elective-III BTC 4xxx Elective-IV

ELECTIVES

BTC 4xxx	Medical Transcription
BTC 4xxx	Nanotechnology
BTC 4xxx	Advanced Molecular Techniques
BTC 4xxx	Virology
BTC 4xxx	Systems Biology
BTC 4xxx	Advance Biochemical Techniques
BTC 4xxx	Stem cell Research
BTC 4xxx	Telemedicine
BTC 4xxx	Marine Biotechnology
BTC 4xxx	Fungal Biotechnology

MS Public Health (MSPH)

MSPH at SZABIST is a two year program distributed into two streams i.e., MSPH (36 credit hours) and MSPH (60 credit hours). For MSPH (36 credit hours), the curriculum includes 10 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS. For MSPH (60 credit hours), the curriculum includes 18 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS. The maximum time limit to complete the MPH degree is four years.

MSPH - (36 Credit Hours)

First Year

Fall Semester

- MSP 5104 Social and Behavioral Aspects of Public Health
- MSP 5101 Basic Epidemiology and Biostatistics
- MSP 5102 Environmental and Occupational Health
- MSP 5103 Health Promotion, Advocacy and Social Mobilization

Spring Semester

MSP 5201 Applied Epidemiology and Biostatistics MSP 5203 Research Methods: Quantitative and Qualitative MSP 5202 Health System MSP 5xxx Elective-I

Second Year

Fall Semester

PROSPECTUS 2018

MSP 5xxx Thesis-I or IRS-I MSP 5xxx Elective -II Practicum OR One Publication in Peer Reviewed Journal (HEC Indexed Journal)

Spring Semester MSP 5xxx Thesis-II or IRS-II MSP 5xxx Elective-III





MSPH — (60 Credit Hours)

First Year

Fall Semester

- MSP 5111 Sociology of Health and Disease
- MSP 5106 Population Dynamics
- MSP 5107 Professional Ethics
- MSP 5105 Mental Health
- MSP 5104 Social and Behavioral Aspects of Public Health

Spring Semester

- MSP 5206 Microbiology
- MSP 5204 Entomology
- MSP 5207 Parasitology
- MSP 5205 Health Care Risk Management
- MSP 5203 Research Methods: Quantitative and Qualitative

Elective Courses/Tracks

Track 1: Epidemiology and Biostatistics

- MSP 5xxx Advanced Epidemiology and Biostatistics
- MSP 5xxx Epidemiological Report Writing
- MSP 5xxx Epidemiology of Communicable and Non Communicable Diseases

Track 2: Health Policy, Management and Economics

- MSP 5xxx Human Resource Management for Health
- MSP 5xxx Health Policy, Planning and Management
- MSP 5xxx Financial Management
- MSP 5xxx Applied Health Economics
- MSP 5xxx Health Care Financing
- MSP 5xxx Supply Chain Management

Track 3: Applied Nutrition and Reproductive Health

- MSP 5xxx Nutrition for Children, Adolescent and Mothers
- MSP 5xxx Community Management of Malnutrition
- MSP 5xxx International Food Organizations
- MSP 5xxx Demography and Population Dynamics
- MSP 5xxx Community Based RH Interventions
- MSP 5xxx Gender Development

Second Year

Fall Semester

- MSP 5101 Basic Epidemiology and Biostatistics
- MSP 5102 Environmental and Occupational Health
- MSP 5103 Health Promotion, Advocacy and Social Mobilization
- MSP 5202 Health System
- MSP 5xxx Thesis-I or IRS-I

Spring Semester

- MSP 5201 Applied Epidemiology and Biostatistics
- MSP 5xxx Thesis-II or IRS-II
- MSP 5xxx Elective-I
- MSP 5xxx Elective-II
- MSP 5xxx Elective-Ill
 - Practicum OR One Publication in Peer Reviewed Journal (HEC Indexed Journal)





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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 or 2 IRS. 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 four years.

First Year

Fall Semester

BIO 5101Advanced Research MethodologyBIO 5102Biostatistics

Spring Semester

BIO 5201Molecular GeneticsBIO 5202Techniques in Biomolecules Analyses

Second Year

Fall SemesterBIO 5xxxElective-IBIO 5xxxElective-IIBIO 5xxxThesis or Elective-V or IRS-I

Spring Semester

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

ELECTIVES

BIO 5xxx	Applied Biotechnology
BIO 5134	Environmental and Industrial
	Biotechnology
BIO 5xxx	Plant Biotechnology
BIO 5xxx	Fermentation Design and Engineering
BIO 5133	Medical Biotechnology
BIO 5xxx	Biocatalysis and Enzymology
BIO 5xxx	Clinical Biochemistry
BIO 5xxx	Drug Discovery and Development
BIO 5131	Biocomputation
BIO 5132	Cancer Biology
BIO 5232	Applied Immunology
BIO 5233	Techniques in Diagnostics
BIO 5xxx	Molecular Dynamics
BIO 5xxx	Food Sampling Techniques and
	Analysis
BIO 5231	Food Quality Management System
BIO 5xxx	Food Toxicology and Adulteration
BIO 5xxx	Food Quality Management System
BIO 5xxx	Food Toxicology and Adulteration



PhD Biosciences

The PhD in Biosciences is minimum 3 year program that requires completing a total of 48 credit hours. The maximum time limit to complete the PhD degree is 8 years. Maximum course load for a semester is 3 courses (9 credit hours).

The following is the break-up of the 48-credit hour courses:

2 Core Courses (6 credit hours) *

4 Elective (12 credit hours) OR 1 IRS (3 credit hours) and 3 Electives (9 credit hours)

1 Thesis (30 credit hours)

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

First Year

Fall Semester

BIO 6101 Statistical Tools for Research BIO 6xxx Elective-I BIO 6xxx Elective-II

Spring Semester

BIO 6201 Research Methodology BIO 6xxx Elective-III BIO 6xxx Elective-IV/IRS-I

Second Year

Fall Semester BIO 6xxx Dissertation

Spring Semester BIO 6xxx Dissertation

Third Year

Fall Semester BIO 6xxx Dissertation

Spring Semester BIO 6xxx Dissertation

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.

Followed by successfully completion of the course work, Comprehensive Examination is required to pass in order 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.

Electives

BIO xxxx	Advances in Molecular Genetics
BIO xxxx	Computational and Systems Biology
BIO xxxx	Advanced Immunology
BIO xxxx	Next Generation Sequencing Techniques
BIO xxxx	Analytical Techniques for Biomolecules
BIO xxxx	Advances in Plant Biotechnology
BIO xxxx	Oncobiology
BIO xxxx	Recombinant DNA Technology
BIO xxxx	Food Science and Technology
BIO xxxx	Cell Signaling Mechanisms
BIO xxxx	Biomaterials Science and Engineering
BIO xxxx	Principles of Synthetic Biology



INTERNATIONAL PROGRAMS

Bachelor of Law (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) in Business Studies

SZABIST offers a 2+1 Top–up program BA (Hons) in Business Studies from the Coventry University, UK. Student will have to complete 27 courses/81 credits and proceed ahead to Coventry University to earn an international degree. It is compulsory for students to complete 27 courses before they continue the third year at Coventry University, UK.

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.

- Bachelor 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.

First Year

Criminal Law Public Law Legal System & Method Elements of the Law of Contract

Second Year/Third Year

Law of Trusts Law of Tort Property Law Jurisprudence and Legal Theory EU Law

*Plus any three subjects from:

International Protection of Human Rights Administrative Law Introduction to Islamic Law Company Law





INTERNATIONAL PROGRAMS

BA (Hons) in Business Studies

Admission Requirements

The candidate must have completed O-Levels (minimum 8 passes) and A-levels (minimum 3-passes)/12th Grade/Intermediate with minimum 50% marks or equivalent from a recognized institution.

Equivalency from Inter Board Committee of Chairmen (IBCC) is required for O & A Levels/High School Diploma/IB Diploma or equivalent.

First Semester

- BA 1101 Introduction to Accounting
- BA 1102 Microeconomics
- BA 1103 Introduction to Computers
- BA 1104 Personal Management
- BA 1206 Oral Communication and Presentation Skills
- BA 1204 Maths for Business

Second Semester

- BA 1201 Financial Accounting
- BA 1202 Macroeconomics
- BA 1203 Management Principles
- BA 1105 English Writing Skills
- BA 2305 Statistics and Mathematics for Business
- BA 2312 Human Behaviour

Third Semester (Summer)

BA 2301 Introduction to Business FinanceBA 2302 Graphic Design in Multimedia

Presentations

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.



ACADEMIC CALENDAR 2018-19 (Karachi Campus)

ACADEMIC CALENDAR 2018-19 (Karachi Campus)

TATT 0010

FALL 2018	
WEEK	COMMENTS
1	Course Registration
2	IS Thesis Advisors Meeting
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	
8	Mid-Term Exams
9	
10	
11	Last Week to Withdraw from Courses
12	
14	
15	
16	Dead Week
17	Final Exam Week
18	Final Exam Week
Sep 01, 2018	New Faculty Meeting/Orientation
Sep 12, 2018	IS Thesis Advisors Meeting
Jan 26, 2019	Comprehensive Exam
Jan 08, 2019	Independent Research Study Presentations of MS/PhD students

Classes Commencement Date

Karachi Campus: Larkana Campus: Islamabad Campus: Dubai Campus: Hyderabad Campus: September 03, 2018 September 03, 2018 September 03, 2018 September 14, 2018 August 20, 2018

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ACADEMIC CALENDAR 2018-19 (Karachi Campus)

ACADEMIC CALENDAR 2018-19 (Karachi Campus)

SPRING 2019	
WEEK	COMMENTS
1	Course Registration
2	
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	
8	Mid-Term Exams
9	
10	
11	Last Week to Withdraw from Courses
12	
13	
14	
15	
16	Dead Week
17	Final Exam Week
18	Final Exam Week
Feb 02, 2019	New Faculty Meeting/Orientation
June 12, 2019	Independent Research Study Presentations of MS/PhD students
June 29, 2019	Comprehensive Exam

Classes Commencement Date

Karachi Campus:
Larkana Campus:
Islamabad Campus:
Dubai Campus:
Hyderabad Campus:

February 04, 2019 February 04, 2019 February 04, 2019 February 09, 2019 January 21, 2019



CAMPUS WISE PROGRAMS OFFERING (FALL 2018)

PROGRAMS OFFERING AT DIFFERENT CAMPUSES OF SZABIST (FALL 2018)

PROGRAMS	CAMPUS				
FROGRAMS	Karachi	Islamabad	Larkana	Hyderabad	Dubai
Bachelor of Business Administration (BBA)	 	/	 ✓ 	 ✓ 	 ✓
BA (Hons.) in Business Studies (BABS)	 ✓ 				
BS Accounting & Finance	 ✓ 	 ✓ 		 ✓ 	
BS Entrepreneurship	~				
BS Computer Science	~	 ✓ 	~	 ✓ 	~
BS Software Engineering		 ✓ 		 ✓ 	
BS Media Science	~	 ✓ 			
BS Social Sciences	~	 ✓ 			
BE Mechatronic Engineering	 ✓ 				
BS Biosciences	~				
BS Biotechnology	 ✓ 				
Bachelor of Law (LLB)	~		~		
Bachelor of Business Studies (BBS)			~		
Bachelor of Education (B.Ed.)					
Master in Business Administration (MBA)		~			~
Executive MBA	 ✓ 	~			~
Masters in Project Management	~	<hr/>			
Professional MBA					
MBA in Banking & Finance					
Masters in Human Resource Management					
Master of Advertising	<u> </u>				
MA Education	~				
MS Public Health (MSPH)	✓ ✓				
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 Data Sciences		· · ·			
MS Educational Leadership and Management		~			
MS Project Management	· ·				
MS Mechatronic Engineering	~	· ·			
MS International Relations	× ×				
MS Economics	· ·				
MS Psychology					
MS Sociology					
PhD International Relations	× ×				
PhD Economics			+		
PhD Psychology	× ×		+		
PhD Sociology	~ ~				
PhD Computing					
PhD Management Sciences		~			
PhD Educational Leadership and Management		~			
PhD Biosciences	~ ~				

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We just Don't Work Hard We Work Smart

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.











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SZABIST Hyderabad Campus Ground, 3rd & 4th floor, State Life Building, Thandi Sarak, Hyderabad Phone # 92-22-2782442-43, Fax # 92-22-2782444 Email: info@hyd.szabist.edu.pk

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