



SZABIST
UNIVERSITY
Islamabad Campus

PROSPECTUS 2024-25



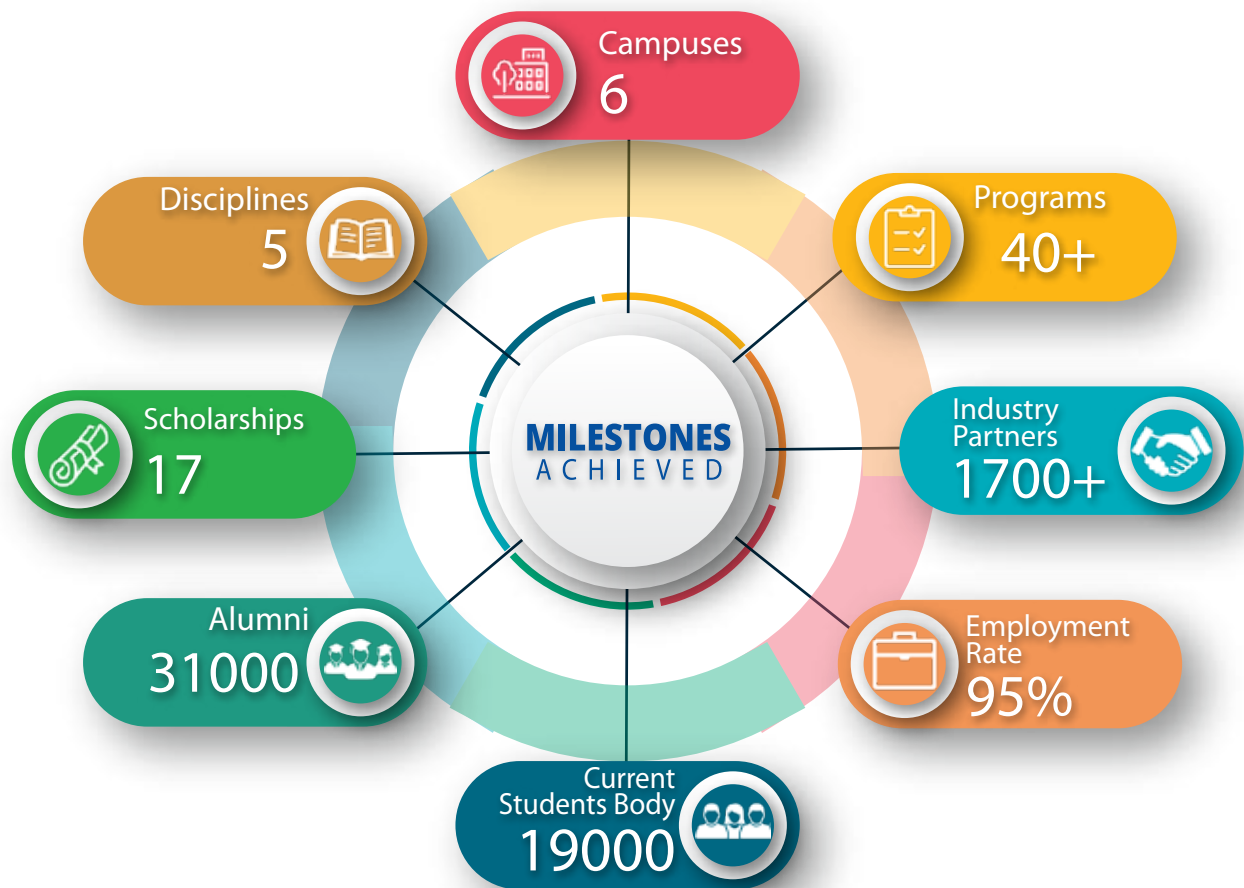
PEOPLE
MAKE THE
EXPERIENCE



WE SEE A
LEADER
IN YOU



SZABIST University at a glance



SHAHEED ZULFIKAR ALI BHUTTO INSTITUTE OF SCIENCE & TECHNOLOGY UNIVERSITY

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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Bachelor of Business Administration (BBA)
BS Business Analytics (BSBA)
BS Accounting & Finance (BS A&F)
BS Accounting & Finance (BS A&F 2.5 Years)
Master of Business Administration (MBA)
CILT (UK) Level 5 Professional Diploma in Logistic & Transport
Executive Master of Business Administration (EMBA)
Professional Master of Business Administration (PMBA)
Masters of Human Resource Management (MHRM)
Master of Project Management (MPM)
MS Project Management (MS PM)
MS Management Science (MS MS)
MS Business Analytics (MSBA)
PhD Management Science (PhD MS)

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

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DEPARTMENT OF COMPUTING

BS Computer Science (BS CS)
BS Software Engineering (BS SE)
MS Computer Science (MS CS)
MS Cyber Security (MS CYS)
PhD Computing (PhD CS)

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BS Artificial Intelligence (BS AI)

MS Data Science (MS DSc)

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BS Social Sciences (BSSS)

BS Psychology (BS PSY)

MS Social Sciences (MSSS)

MS Development Studies (MS DS)

MS Clinical Psychology (MS CLPsy)

MS Sociology (MS Socio)

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Bachelor of Media Science (BMS)

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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 University

"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 SZABIST University, one of the most prestigious higher education institutions of Pakistan.

At SZABIST University, we believe that innovative thoughts and high ideals teach the values of hard work, creativity and continuous learning. We prepare our students for professional careers in a wide variety of programs including Management, Computer, Social and Media Sciences, Mechatronic 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 of providing opportunity for high quality tertiary education and research to the youth of Pakistan, SZABIST University has a presence in Karachi, Islamabad, Larkana, Hyderabad, Ghara and an overseas campus in Dubai, UAE.

At SZABIST University, 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 our students to realize and nurture their true intellectual and professional potential.

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

SZABIST University is investing considerable resources for renovation and upgradation of its infrastructure and acquisition of additional physical facilities for its campuses. A "Graduate Research" is also being established to fulfill emerging research and academic requirements.

As I welcome the new students, I encourage them to strive for excellence and while they equip themselves with marketable skills, they should actively work to promote the values of a tolerant, inclusive and pluralistic society.

The motto of SZABIST University 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 University.

Dr. Azra Fazal Pechuho
Chancellor
SZABIST University

PRESIDENT'S MESSAGE



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

Over the past 27 years, SZABIST University's national and international market reputation has been significantly enhanced. This is evident from the increased enrollment of about 19,000 students in its six Campuses-Karachi, Larkana, Hyderabad, Ghara, Islamabad and Dubai (UAE).

SZABIST University 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 15 Bachelors, 16 Masters and 5 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 and Accreditation Councils, 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 University 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, SZABIST University was awarded 94% for its Quality Enhancement processes. Quality assurance measures are rigorously applied through tools such as Program Self-Assessment Reports, feedback of relevant stakeholders, publications and fulfilling documentation requirements of the regulatory authorities.

We hope you will become part of the SZABIST University community of students and graduates and ultimately the global network of SZABIST University alumni.

Shahnaz Wazir Ali
President
SZABIST University

VICE PRESIDENT'S (ACADEMICS) MESSAGE



A great leader Mr. Nelson Mandela said: "Education is the most powerful weapon which you can use to change the world."

SZABIST University has seen exponential growth in its programs, students, and physical infrastructure since its inception in 1995. This could be possible with the full support of its Management, especially of its worthy Chancellor, Dr. Azra Fazal Pechuho.

The whole purpose of education is to create "Analytical Minds". As a responsible institution, we just don't believe in classroom studies but believe in complete personality development. We, therefore, regularly conduct co-curricular and extracurricular activities through our various students' societies. We aim to prepare our students to be useful to society.

SZABIST University now has six campuses in Karachi, Islamabad, Larkana, Hyderabad, Gharo, and Dubai. Karachi campus is the mother campus having more than 8000 students enrolled in its 40-plus academic programs in Management Sciences, Computer Science, Social Sciences, Media Science, Life Sciences, Education, Mechatronic Engineering, and Law. Our three-year LLB program is offered in collaboration with the University of London.

SZABIST University programs comply with HEC recommended course plans and are accredited by regulatory bodies such as NBEAC, NCEAC, PEC, NACTE, and CIEC. The learning outcomes of the programs ensure to create critical & creative thinking, acquire problem-solving skills, and professionally handle all pedagogical tools. We are fully aware that a University without Research is like a "Body" without a "Soul"; therefore, we emphasize research activities at levels in our programs.

Finally, I thank all the newcomers for choosing SZABIST University for their academic pursuits and wish them a happy stay during the entire period of their course of studies. I expect, as SZABISTian, you will show a high level of maturity through your conduct and actions.

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

VICE PRESIDENT'S (DEVELOPMENT AND FINANCE) MESSAGE



Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology initiated by Shaheed Mohtarma Benazir Bhutto and currently functioning under the able leadership of its Chancellor Dr. Azra Fazal Pechuho has emerged as a leading higher education institute that plays a vital role in producing highly qualified graduates.

Here we provide the environment, facilities, academic and professional experiences, and opportunities for research that aim at a creative, ethical, smart and holistic personality. With the commencement of the new academic year, students are encouraged to utilize the wide range of services and facilities, the events, programs, seminars, and festivals that will make their life at SZABIST University interesting.

Get involved, make the most of your time and gain the experience that will make you the smart individual in demand at national and multinational firms within the country and abroad.

We are here to support you and welcome you to a fulfilling and interesting period at SZABIST University.

Nasreen Haque
Vice President (Development and Finance)
SZABIST University

VICE PRESIDENT'S (ADMINISTRATION) MESSAGE



I am delighted to welcome you to Shaheed Zulfikar Ali Bhutto Institute of Science and Technology University. At SZABIST University you will become part of a strong and supportive community that values academic excellence and diversity.

The unfailing dedication and vision of Shaheed Mohtarma Benazir Bhutto has led SZABIST University to grow into an exceptionally well established and well reputed institution. Today SZABIST has developed into a strong multidisciplinary institution with campuses in Karachi, Hyderabad, Larkana, Ghara, Islamabad and Dubai.

Over the years, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology University has excelled in the field of education and has produced some of the most well qualified and outstanding graduates.

We at SZABIST University are dedicated not just to the purpose of education and learning, but also to assisting and guiding students to adjust to university life and to discover their skills and talents. We encourage students to promote a campus environment that is respectful, supportive and safe.

SZABIST University is truly proud of the role students play in the life of the institution and it is hoped that you will also play an important part.

It is hoped that the Prospectus 2024 will serve as a useful guide in planning out your academic journey and that each of you have a well learning and fruitful experience here at SZABIST University.

With best wishes

Imtiaz Kazi
Vice President Administration
SZABIST University

HEAD OF CAMPUS'S MESSAGE



I welcome you to SZABIST University, Islamabad Campus, which has made great progress and has become one of the leading educational institutions of higher learning. SZABIST University remains affordable for its students, hailing from socio-economically diverse cadres of society, while ensuring all standards of educational process being met effectively. Such an arrangement has shaped a classic top-notch Pakistani culture at all campuses of SZABIST University giving it an edge over other educational institutions of the sort.

In addition to excelling in academic standards, students' active participation in socio-cultural activities of high canons such as tree plantation, blood donation, youth awareness,

community service campaigns/drives/projects and the like nurture exceptional values of social importance and imbibe a high sense of social and civic responsibility among the youth. The university, energized by its distinguished faculty and strengthened by its brilliant students, now stands in the highest echelons of education in the country and strives to forge new paths for a brighter tomorrow of Pakistan.

Following the right track of education where personality development and character building go hand in hand with academic excellence, the university has developed an appropriate environment spearheaded by its distinguished faculty, capable management, and talented students. SZABIST University family—the management, the faculty and the students, all are conscious of their coordinated role, being equal stakeholders in the entire educational process at the campus. We are also proud of our alumni who are actively operational in the corporate world, realizing the true mission of SZABIST University. The laurels and the good word they bring us further our innovative plans of future expansion and improvement.

We at SZABIST University have made it possible through our motto of quality education at affordable cost for all. We welcome students from varied backgrounds and faraway places like GB, AJK, Baluchistan & KPK to present a united Pakistani community of students, engaged in a ceaseless endeavour to set competitive educational standards and seek unprecedented horizons in higher education to stimulate and lead the industrial transformation of the country.

This prospectus provides you with comprehensive information about our programs. We hope that you will become part of the SZABIST University, Islamabad Campus student community for a fruitful, self-fulfilling, and productive stay at SZABIST University.

Khusro Pervaiz Khan
Head of Islamabad Campus
SZABIST University

INTRODUCTION

SZABIST University is proud to offer quality education in the areas that are crucial for Pakistan's socio-economic development. It was established as a Degree Awarding Institute (DAI) in the year 1995 through the Legislative Act of Sindh Assembly and chartered as University by Sindh Assembly through Sindh Act No. XIX of 2023. It is ranked as one of the most reputed universities by the Higher Education Commission (HEC) of Pakistan and the Chartered Inspection and Evaluation Committee (CIEC).

SZABIST University comprises six campuses located in Karachi, Hyderabad, Larkana, Islamabad, Dubai (UAE), and Ghara with a current student population of approximately 19,000. Collectively, over 31,000 talented graduates have been proudly awarded degrees by all campuses of SZABIST University. Our alumni are sought by national and multinational organizations and hold key positions in several reputable firms. All programs of SZABIST University are conducted under strict compliance of the relevant regulatory bodies such as NBEAC, NCEAC, NACTE, PEC and KHDA Dubai (UAE).

The university offers undergraduate, graduate and post graduate degrees in 5 different disciplines: Faculty of Management Sciences, Faculty of Computing and Engineering Sciences, Faculty of Media Sciences, Faculty of Education and Social Sciences, and Faculty of Life Sciences. Additionally, SZABIST University offers LLB program, CertHE (Law), and BABS program as external programs in affiliation with University of London and Coventry University, UK, respectively.

SZABIST University is a registered member of the following international and national associations: International Association of Universities (IAU), Paris. The Association to Advance Collegiate School of Business (AACSB), Singapore. Asia-Pacific Quality Network (APQN), People's Republic of China. The Talloires Network, USA. The Chartered Institute of Logistics and Transport (CILT), UK. Shifa Foundation Islamabad, Iqra University Islamabad & Universiti Teknologi MARA UiTM, Malaysia.

SZABIST University, Islamabad campus is housed in a purpose-built edifice located in H-8/4 Islamabad. This sector is reserved for institutions of the Federal Capital. Hence, it is surrounded by quality institutions including Roots college, OPF Boys College, Shifa College of Medicine, Federal Board of Intermediate & Secondary Education, Shaikh Zaid International Academy, Lahore Grammar School, Beaconhouse School, and The City School. SZABIST University is just at a walking distance from the main Express Way and Metro Bus Stop that connects Rawalpindi and Islamabad. It shares a border with Bait-ul-Mal, Government Post Graduate Commerce College and another with Shifa International Hospital. Designed in accordance with on-site instructions of Mohtarama Benazir Bhutto Shaheed, the campus has fulfilled her academic dreams. It is just fifteen minutes' drive from various localities of Islamabad & Rawalpindi.

PROGRAMS & CURRICULA

DEGREES OFFERED

All six campuses of SZABIST offer various degree programs in different disciplines so please refer to page 84 for details.

Bachelor of Business Administration (BBA)

SZABIST University offers a four-year (eight semesters) BBA degree program of 144 credit hours. This is SZABIST's flagship program. For the BBA program, students are required to complete 47 courses and 03 credit hours Business Project, a 02 credit hours Community Service Project and 03 credit hours Graded Internship. The students will take 4 Program Electives courses from Management, Marketing, Finance, Entrepreneurship or Supply Chain Management. To obtain the BBA degree, students have to complete 144 credit hours including a six week graded internship.

BBA program is an ACCA accredited program; those who complete BBA from SZABIST University Islamabad Campus, will get an exemption in 06 out of 09 ACCA Foundation papers (F1, F2, F3, F5, F7 and F9). BBA students and alumni are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies. BBA Program has been accredited by National Business Education Accreditation Council (NBEAC) and is also affiliated with Chartered Financial Analyst (CFA) Institute.

Maximum time limit to complete the BBA degree is six years.

Bachelor of Science in Business Analytics (BS BA)

SZABIST University Islamabad Campus offers a four-year (eight-semester) BSBA degree with specializations in Marketing, Finance, Human Resource Management and Supply Chain Management. The program integrates business acumen with advanced analytics tools, focusing on descriptive, diagnostic, predictive, and prescriptive analytics to equip students for data-driven decision-making. The curriculum prepares students to analyze data, develop strategies, and leverage analytics tools for informed business decision making.

BSBA Program is comprised of 49 courses, including a 3-credit-hour internship (144 credit hours total).

The maximum time limit to complete the degree is six years.

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

SZABIST University Islamabad Campus offers a 4-year (8 semesters) Bachelor of Science in Accounting & Finance

(BS A&F) program, consisting of 48 Courses, 3 credit hours Capstone Project, and 3 credit hours graded internship. Students have to complete 144 credit hours to obtain the (BS A&F) degree. Students have the option to take:

- Finance as Major and Accounting as Minor /
- Accounting as Major and Finance as Minor

Graduates of (BS A&F) program will get exemptions in 9 papers from both Institute of Chartered Accountants of Pakistan (ICAP) and Association of Chartered Certified Accountants (ACCA), UK. (BS A&F) students are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass 3 case studies. Whereas, (BS A&F) alumni will be exempted from all 13 courses and operational level case studies and will only attempt 2 case studies. The (BS A&F) program is affiliated with the Chartered Financial Analyst (CFA) Institute.

The maximum time limit to complete the degree program is six years.

SZABIST University Islamabad Campus also offers a 2.5-year Bachelor of Science in Accounting & Finance program exclusively for CAF qualified students of the Institute of Chartered Accountants of Pakistan (ICAP). CAF qualified students are exempted from 60 credit hours (20 courses) of course work and have to complete 78 credit hours (28 courses) of course work, a 3 credit hours Capstone Project, and 3 credit hours graded internship. Students of (BS A&F)-2.5 year can also select Finance as Major and Accounting as Minor / Accounting as Major and Finance as Minor.

Bachelor of Science in Computer Science (BS CS)

SZABIST University, Islamabad Campus 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 full time day program and consists of 44 courses (five courses per semester) with a total of 130 credit hours. The complete course plan includes 7 technical electives. These 7 technical electives provide intensive learning in the diversified areas of Computer Science and allied disciplines. Internship opportunities are provided to complete degree requirement.

PROGRAMS & CURRICULA

The maximum time limit to complete the degree program is six years.

Bachelor of Science in Software Engineering (BS SE)

The BS Software Engineering program is offered through a trained foreign qualified faculty. It consists of 44 courses with a total of 130 credits hours. The core courses focus on the fundamentals of software engineering followed by a broader range of courses through which students can choose to specialize their learning. The BS Software Engineering curriculum covers all important facets of the discipline of software engineering including project management, requirements analysis, software architecture, software development, and quality assurance. Throughout the degree program, students are exposed to the theory, techniques, tools, and practicalities of software engineering.

The maximum duration to complete the degree is six years.

Bachelor of Science in Artificial Intelligence (BS AI)

The Bachelor of Science in Artificial Intelligence BS(AI) program is offered by the Department of Robotics and Artificial Intelligence. This comprehensive four-year program encompasses a total of 44 courses, amounting to 130 credit hours. To fulfill the degree requirements, students are provided with internship opportunities, integrating practical experience with academic learning. The BS(AI) program is structured as a full-time, daytime curriculum, meticulously designed to cover the forefront of technological advancements in fields such as Machine Learning, Deep Learning, Explainable AI, Evolutionary Computing, Computer Vision, Software Engineering, and Natural Language Processing. The program comprises of 46 credit hours of Computing Core courses, 18 credit hours of Domain Core courses, 21 credit hours of Domain Electives, 9 credit hours of Mathematics and Supporting courses, 3 credit hours of Elective Supporting courses, and 33 credit hours of General Education Requirement courses.

The maximum duration of the program is six years.

Bachelor of Science in Social Sciences (BS SS) (Economics, Sociology, Psychology, Development Studies & International Relations)

SZABIST University, Islamabad Campus offers a four-year (eight semesters) BSSS degree in Economics, Sociology, Psychology, Development Studies, and International Relations. BS Program is essentially day program and consists of 46 courses (six courses per semester) and research project (I&II) with a total of 142 credit hours.

The maximum time limit to complete the BS degree is six years.

Bachelor of Science in Psychology (BS PSY)

To obtain BS degree in Psychology, students are required to complete a total of 139 credit hours. The degree consists of a total of 47 courses (139 credit hours) including inter ship (3 Credit Hours) and a Research Project/Capstone Project (6 Credit Hours).

The maximum time limit to complete the BS degree is six years.

Bachelor of Media Sciences (BMS)

The Faculty of Media Sciences offers a comprehensive 4-year Bachelor of Media Science degree with streams in Film and Television production, Advertising Strategy & Design, Journalism and Game Design. To earn an undergraduate degree, students must enroll in and successfully complete a total of 136 credit hours which include 44 courses, a 6-credit hours Final Year Project, and an internship. Forty-four courses include: 34 core courses, 7 from the stream of specialization requirements, i.e. Film and Television production, or Advertising Strategy & Design, Journalism or Game Design and 3 Cross Specialization Stream Electives.

All students must complete their degree within six 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. MBA Program has been accredited by National Business Education Accreditation Council (NBEAC) which is an independent professional council established by Higher Education Commission.

SZABIST offers both MBA Day and Evening programs with specialization in Marketing, Finance, Management, Human Resource Management, Supply Chain Management.

MBA program is intended for students having a four-year bachelor degree (e.g. BS-CS, BE, BBA etc.) or 16 years of education in different disciplines. The minimum duration to complete this program is two years with 72 credit hours. Twenty-two courses (66 credit hours) and 6 credit hours of Research Project or Thesis spread over two semesters (03+03) are required to complete the program. Students with undergraduate degree in Management Sciences, Business Administration, Commerce or

PROGRAMS & CURRICULA

equivalent qualification are exempted 36 credit hours of course work and they are required to complete remaining 36 credit hours in 1.5 years. Students are also required to undertake a six weeks duration of internship during summer.

The maximum duration to complete MBA degree is four years.

MBA (non-finance electives) students and alumni are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies. MBA students with finance electives and alumni are exempted from all 13 courses and operational-level case studies and will only attempt two case studies.

CILT (UK) Level 5 Professional Diploma in Logistics & Transport

The Chartered Institute of Logistics & Transport (CILT) is the leading professional body associated with logistics and transport, having over 35,000 members in over 100 countries worldwide.

SZABIST has signed a Memorandum of Understanding (MOU) with CILT-UK to offer a Level 5 Professional Diploma. Now, Business and Engineering Professionals and students have the opportunity of opting for International Professional Diploma in Logistics and Transport by doing five courses. The Professional Diploma fee is to be paid by the student.

Executive Master of Business Administration (EMBA)

SZABIST University, Islamabad Campus offers a two-year EMBA degree program for executives and middle-level managers striving for excellence and greater challenges in their careers. This distinct program is specifically designed for those executives who aim to improve 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 (60 credit hours), and Capstone Project or Thesis (3+3 credit hours and spread over 2 semesters) are required to graduate.

The maximum time limit to complete the EMBA degree is four years.

EMBA students and alumni are exempted from all 13 courses of Chartered Institute of Management

Accountants (CIMA) qualification, and are only required to pass three case studies.

Professional Master of Business Administration (PMBA)

PMBA is a one-year program spread over two semesters and consists of 33 credit hours of teaching. Ten taught courses (30 credit hours) and Business Project (3 credit hours) must be completed. Each semester is of four months duration. Candidates register for five / six courses offered each semester to complete the degree within one year. The PMBA is equivalent to Post Graduate Diploma as per HEC guidelines.

Maximum time limit to complete the PMBA program is four years.

Master in Human Resource Management (MHRM)

MHRM is a one-year weekend program. The student is required to complete 33 credit hours of coursework/projects within one full calendar year.

The Master in Human Resource Management is designed for those who have functional responsibility to carry out the duties of an organization's human resource department seasoned human resource staff members wishing to keep current; newcomers to the field requiring new knowledge and skills; or specialists wanting to broaden their knowledge.

Maximum time limit to complete the MHRM degree is four years.

Master of Project Management (MPM)

MPM is the first and only project management program in Pakistan which is accredited by PMI, USA.

The Master of Project Management (MPM) is designed to enable individuals to manage complex projects through modern project management approaches. MPM is a one-year weekend program comprising 30 credit hours spread over two semesters. A total of 10 courses are required to graduate.

The maximum time limit to complete the MPM degree is four years.

Master of Science in Project Management (MSPM)

SZABIST University Islamabad Campus offers MS in Project Management (MSPM) program which is equivalent to M.Phil. The program lays the foundation for students who are planning to pursue doctoral studies.

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The university offers two streams for MSPM. The first stream is Course Work-based and the 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, students are required to complete 30 credit hours.

The maximum time limit to complete the MSPM degree is 4 years.

The students are required to clear GAT General test or HAT relevant with a minimum 50% score, or GRE as applicable for MS student.

Master of Science in Management Sciences (MS MS)

SZABIST offers MS degree with concentration in the specialized areas of Human Resource Management, Marketing, Business Analytics 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 are to be completed.

The maximum time limit to earn an MSMS degree is 4 years.

As per HEC guidelines, the students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS student.

Master of Science in Business Analytics (MSBA)

SZABIST provides a unique ecosystem that enables working knowledge based on hands-on learning skills acquisition and blend of research thesis and capstone project stream.

The market driven program and the blend of leadership acumen and expertise in data analytics skills matching the requirement of digital economy and augmented with SZABIST corporate linkage offers endless opportunities at national and international levels.

There are two streams available for MSBA. 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 to complete 8 Courses of 24-credit

hours and one Research Thesis or Capstone Project of 6-credit hours.

The maximum time limit to complete the MSBA degree is 4 years.

As per HEC guidelines, the students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS student.

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 & 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 for 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 courses (up to 12 credit hours courses to be determined in consultation with Program Manager). The programs such as BSCS, BSIT, BSSE, BSCE & BSCSE shall not require any extra courses.

The maximum time limit to complete the MSCS degree is four years.

As per HEC guidelines, the students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS student.

Master of Science in Cyber Security (MS CYS)

The MS (Cyber Security) program is of 2-years duration are offered in the evening. It requires 33 credit hours, including 4 core courses (3 credits hours each) and 5 elective courses. The student has the option to complete MS through coursework only or with research. If a 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 a thesis (6 credit hours).

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The maximum time limit to complete the MS CYS degree is 4 years.

The students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS students.

Program Objectives

The cyber security program is planned to satisfy the increasing security intensive needs of private and public sector organizations. In this program, students will equip with various skills and techniques which are important for securing IT networks and systems. Students having a strong background in Mathematics, Computer Science, Engineering or equivalent are the potential candidates for the Master of Science Cyber Security program. Upon successful completion of the degree program, students will be able to use the latest tools and techniques of cyber security. After graduating from this program, students may have a potential career in various disciplines such as the telecommunications sector, software industry, intelligence agencies, e-businesses, e-government, banking, financial technologies, health care, and insurance. The goal of the program is to enable students to apply scientific and technological development in building a secure information society. The aim is to make technology-driven solutions to secure cyberspace. Moreover, to allow students to have hands-on digital forensics experience, this deals with the investigation and recovery of information found in digital devices to identify computer-based crime. The area is becoming critical for both data security and law enforcement. MS in Cyber Security offers strong expertise for a career in securing and managing the cyber society.

Master of Science in Data Science (MS DSc)

The Master of Science in Data Science is offered by the Department of Robotics and Artificial Intelligence. This two-year evening program requires the completion of 30 credit hours comprising 10 courses or 08 courses and a thesis. The curriculum includes 3 core courses, 2 specialization courses in data science, and 3 elective courses. Additionally, students have the option to complete the MS(DSc) either through coursework or with research work. For those choosing the coursework route, it is mandatory to complete 2 additional courses, each worth 3 credit hours. On the other hand, students opting for the research path must undertake either 2 Independent Research Studies (IRS), totaling 6 credit hours, or a research thesis, also totaling 6 credit hours.

The maximum duration to complete the MS(DSc) degree is 4 years.

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

Master of Science in Social Sciences (MS SS) (Psychology, Economics, Sociology, International Relations)

SZABIST offers MS Social Sciences degree with specializations in Psychology, International Relations, Economics or Sociology. There are two streams available for MS. One stream is course work based 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 streams, 30 credit hours are to be completed.

The maximum time limit to complete the MSSS degree is 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 Development Studies (MS DS)

To produce purely development practitioners, SZABIST offers MS in Development Studies (equivalent to M.Phil.). Development Studies is a multi- and interdisciplinary field of study, that seeks to understand social economic, political, technological and cultural aspects of societal change, particularly in developing countries.

Development Studies is characterized also by normative and policy concerns. It aims at contributing to possible solutions to societal problems that development or its absence may produce. There are two streams available for MS. One stream is Course Work based and other one is Research based stream. Furthermore, two specializations have been added in main streams including (i) Climate Change Adaptation and Disaster Management & (ii) Livelihood & Sustainable Development. Workshops and supervised internship are also added in the program for practical and hand on experience

The maximum time limit to complete the MSDS degree is 4 years.

As per HEC guidelines, the students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS students.

Master of Science in Clinical Psychology (MS CLPsy)

Department of Social Sciences offers MS Clinical Psychology. It is an evening and weekend program that consists of 09 courses (26 credit hours), Thesis (06 credit

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hours) and Clinical Internships of 06 credit hours. Total program credit hours are 38.

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 11 courses and 02 internships. In the Research Based Stream, the student is required to complete 09 Courses (26 Credit Hours), 06 Credits Clinical Internship and One Thesis (6 Credit Hours). In both the streams, 38 Credit hours are to be completed.

The maximum time limit to complete the MS CLPsys degree is 4 years.

As per HEC guidelines, the students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS students.

MS (Sociology)

SZABIST offers MS degree in Sociology. The program consists of eight courses (24 credit hours), and one research thesis (6 credit hours) within a total of 30 credit hours.

The maximum time limit to complete the MS Sociology degree is 4 years.

As per HEC guidelines, the students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS students.

Master of Media Science (MMS)

The Faculty of Media Science at SZABIST offers Master of Media Science degree. Students can select any one of the following 4 streams of specialization;

(1) Media Production and Design stream– 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. This will also be beneficial 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;

(2) Digital Journalism & Global Communication 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;

(3) Fashion Media & Digital Communication stream is for professionals who want to join the growing Fashion media and merchandising industry in Pakistan, in addition to courses that help in managing public relations and communication strategy of companies and nonprofits.

(4) Advertising Strategy & Design is 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 Media Science degree, students are required to complete 30 credit hours through Coursework: 10 courses (4 core courses and 6 electives) or Research based stream comprising of 4 core courses, 4 electives and Thesis (6 credit hours).

All students must complete their degree within four years.

The students are required to clear GAT General test or HAT relevant with a minimum 50% score or GRE as applicable for MS students.

Doctor of Philosophy

SZABIST offers PhD degree in Management Sciences, Psychology & Computing in strict adherence to the HEC guidelines.

The admission requirement for PhD is minimum 17.5 years of relevant education with the minimum 3.0 CGPA, GAT Subject with minimum 60% score or GRE Subject with minimum score of 640 and fulfilling the admission requirements of SZABIST.

For Ph.D. Management Sciences, SZABIST's own GAT Subject test can be cleared with 60% score in lieu of GAT Subject. 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 to pass Comprehensive Examination within two attempts. The dissertation carrying a weight of 30 credit hours is required to be completed and 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 external evaluators in

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technologically advanced countries.

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.

The time limit to earn a PhD degree is from 3 to 8 years.



Grading Plan

The following Letter Grade Plan is followed at SZABIST:

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



ADMISSION REQUIREMENTS

NOTE:

- All applicants will be required to appear in an entrance test and interview /group discussion held by SZABIST.
- Conversion of A-Level grades or equivalent must be 50% and above for all undergraduate programs.
- Intermediate students are required to get their SSC and HSSC certificates attested by Inter Boards Coordination Commission (IBCC).
- Equivalency from Inter Boards Coordination Commission (IBCC) is mandatory for O & A Levels/High School Diploma/IB Diploma or equivalent.
- High School Diploma or International Baccalaureate (IB) students appearing for examination from Pakistan shall have to pass Islamiat, Pakistan Studies & Urdu either with O Levels or SSC.
- Verification of last degree from Higher Education Commission (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.
- Admission of Foreign students are subject to clearance from the relevant Agencies /NoC from HEC.

BACHELOR DEGREE PROGRAMS

BBA/BS Programs

For admission in the BBA/BS programs, the candidate must have completed O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) and A-levels (minimum 3 Subjects)/12th Grade/Intermediate with minimum 50% marks or equivalent from a recognized institution.

For admission in BSSS & BS Psychology, the minimum eligibility criteria is 45% /2nd Division in HSSC/equivalent qualification in required for admission w.e.f Spring 2025 and onward.

For BS Computer Science, Software Engineering and Artificial Intelligence programs, candidates who have not studied Mathematics at Intermediate/A-Levels have to pass deficiency courses of Mathematics (06 credits) in first two semesters.

For BS (A&F) 2.5 years duly verified Certificate in Accounting & Finance (CAF) from Institute of Chartered Accountants of Pakistan (ICAP) is required.

Equivalency of grades for the candidates having Cambridge High School Certificate are obtained as follows:

A-Level Grade Equivalent Intermediate %

A	85
B	75
C	65
D	55
E	45

MASTERS DEGREE PROGRAMS

Master of Business Administration (MBA)

For admission in the MBA program, the candidate must possess a 4 years bachelor degree with minimum 2.0 CGPA or 16 years of education with minimum 50% marks from a university recognized by the HEC.

Executive Master of Business Administration (EMBA)/ Professional Master of Business Administration (PMBA)

For admission in EMBA/PMBA program, the candidate must possess 16-year education or a 4 year bachelor degree with minimum 50% marks/ 2.0 CGPA from a university recognized by the Higher Education Commission (HEC) in any field of study with 3 years professional work experience (verifiable) at some well known organization. This requirement is necessary to seek admission in these programs.

Master in Human Resource Management (MHRM)

For admission in the MHRM program, the applicant must possess a minimum of 16 years of education/4-year Bachelor/Masters degree with minimum 50% marks/CGPA 2.0 from an HEC recognized educational institute. Relevant work experience of minimum 2 years is required for admission in MHRM.

Master of Project Management (MPM)

For admission in the MPM program, the applicant must possess a minimum of sixteen years of education/4-year Bachelor with a minimum of 50% marks/2.0 CGPA from an HEC recognized educational institute.

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 with a minimum of 2.0 CGPA or a minimum 50% marks from an HEC recognized university.

GAT (General) or HAT relevant is mandatory with minimum 50% score or GRE as applicable for MS students.

Master of Science in Management Sciences (MS MS)

For admission to MS Management Sciences candidates must possess 16 years of relevant education with minimum 50% marks/2.0 CGPA from a university recognized by HEC.

GAT (General) or HAT relevant is mandatory with minimum 50% score or GRE as applicable for MS students.

ADMISSION REQUIREMENTS

Master of Science in Business Analytics (MS BA)

For admission to MS Business Analytics candidates must possess 16 years of relevant education with minimum 50% marks/2.0 CGPA from a university recognized by HEC.

Students from non-relevant degree program shall be required to complete remedial / deficiency courses (up to 12 credits) to make them technically at par with the fellow graduates. The credits of these courses will not contribute to the CGPA. These course will be mentioned on the transcript with a zero GPA. The length of the completion of the degree might be increased but the maximum limit of four years of degree completion will remain the same.

GAT (General) or HAT relevant is mandatory with minimum 50% score or GRE as applicable for MS students.

Master of Science in Computer Science (MSCS)

For admission to MS Computer Science program candidates must possess 16 years of relevant education with minimum 50% marks/2.0 CGPA from a university / institute recognized by HEC.

GAT (General) or HAT relevant is mandatory with minimum 50% score or GRE as applicable for MS students.

Master of Science in Data Science (MS DSc)

For admission in the MS (DSc) program candidates must possess 16 years of relevant education (4 years BS(CS) or equivalent) with a minimum of 50% marks / 2.0 CGPA from HEC recognized University / Institute. The students with 16 years of education in the disciplines of Information Technology, Software Engineering, Computer Engineering, Electrical Engineering, Statistics, Mathematics, Business Administration, Accounting & Finance, Economics, or other relevant disciplines, are also eligible to apply provided that they take deficiency courses.

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

Master of Science in Cyber Security (MS CYS)

For admission to MS (Cyber Security) program candidates must possess 16 years of relevant education with minimum 50% marks/2.0 CGPA from a university / Institute recognized by HEC.

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

MS SS

(International Relations, Economics, Psychology, Sociology)

For admission in MS SS (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) or HAT relevant is mandatory with minimum 50% score as applicable for MS students.

Master of Science in Development Studies (MS DS)

The candidates must possess 16 years of relevant education with minimum 2nd Division/2.0 CGPA from a university recognized by HEC. The candidate who do not have a non-relevant degree in Development Studies or its related disciplines, have to register for deficiency courses. The relevancy of the degree and number of deficiency courses will be determined on case to case basis by the Program Manager, as approved by Academic Council.

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

Master of Science - Clinical Psychology

For admission to MS (Clinical Psychology) candidates must have sixteen years of relevant education or 4-year bachelor education (with psychology as a major subject) or 2 years bachelor (B.A./B.Sc. with Psychology as a subject) and 2 years Master of Psychology (M.A., M.Sc.) with minimum 50% marks or 2.0 CGPA.

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

Master of Science in Sociology (MS So)

For admission in MS Sociology program, candidates must possess 16 years of relevant education with minimum 2nd Division/2.0 CGPA from a university recognized by HEC. The candidates with a non-relevant degree may also apply but will require to complete deficiency conversion courses in consultation with Program Manager, as approved by Academic Council.

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

Master of Media Science (MMS)

For admission to the MMS, Program candidates must possess 16 years of education with a minimum 50% Score /2.00 CGPA from an HEC recognized university in a related field of Media, advertising, communication design, applied or performing arts. Candidates with non-relevant degrees

ADMISSION REQUIREMENTS

(BBA, BSCS, MSc., MCom., MA, etc.) may also apply but will require to complete deficiency conversion courses (Up to 12 credit hours to be determined in consultation with Admission Committee).

Students need to complete remedial/deficiency courses (up to 12 credits hours) in the first semester before they will be permitted to continue regular courses. This semester will be considered a zero semester and the credits will not contribute to the CGPA. These courses will be mentioned on the transcript with a zero GPA. The length of the completion of the degree will increase by one semester though the maximum limit of four years of degree completion will remain the same.

Students must complete GAT or HAT relevant with a minimum of 50% score.



DOCTORAL DEGREE PROGRAMS

Admission Requirements

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 60% score or 3.0 CGPA, and have passed GRE Subject with minimum score of 640/GAT (subject) with minimum 60% score. Clearing GAT (Subject)/GRE is mandatory for admission in PhD.

For PhD Management Sciences, SZABIST's own GAT Subject test may be cleared with minimum 60% score in lieu of GAT Subject.

Student would have to appear before admission committee for interview.

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 the applicants with non-relevant degrees, the candidate will be required to Pass GRE Subject/equivalent test with minimum 50% marks in the discipline of admission. He/she would also be required to take deficiency courses (Level 7) of minimum 6-9 cr. hrs. as determined by the department / admission committee. Final decision of admission will be taken by the concerned department.

Credit Hours 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 Computing, Psychology and Management Sciences.

PhD Degree Milestones

Following is the step by step procedure for PhD:

- Applying for admission along with Statement of Purpose
- 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 Pre-Defense Seminar
- Receiving Satisfactory reports from foreign evaluators
- Clearing Open Defense

Two interdisciplinary courses can be allowed with the approval of both relevant Program Managers subject to the relevancy of courses.

ADMISSION REQUIREMENTS

Comprehensive Examination

After completion of the required course work that includes 5 courses and one IRS, all PhD students must pass the PhD Comprehensive Examination in two attempts as per HEC requirement. Failure to pass comprehensive examination in two attempts will result in cancellation of admission. Maximum Course Load allowed in each semester is nine credit hours.

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. At the start of dissertation, the student will work on Proposal for Dissertation comprising of six credit hours. The PhD research proposal must be presented before the Panel of Examiners duly approved by DC/BASR. The Research Proposal Defense must be cleared within 1st six semesters from the date of admission. Failure to pass Research Proposal Defense within 1st six semesters from the date of admission will result in cancellation of admission.

Dissertation

A student may register for 3, 6, 9 or 12 credit hours in regular semesters (Spring or Fall). However, for registration in 12 Credit Hours, approval from Program Manager is required. Registration in 12 credit hours can be done only once throughout research phase. No registration is allowed in Summer in general, as it is not a regular semester. The time frame for completing PhD Degree is minimum three years and maximum eight years.

Publication Requirements

All PhD candidates are required to publish research paper/(s) in the area of their research as per HEC Graduate Policy-2023. The paper/(s) must be published before sending the dissertation to two foreign evaluators.

Pre-Defense Seminar(s)

Before sending the dissertation to two foreign evaluators belonging to technologically advanced countries in the relevant field, the candidate has to demonstrate his or her research work in front of a panel of experts. The candidate is required to incorporate the necessary changes as proposed by the panel of evaluators in the Pre-Defense Seminar.

External Evaluation of PhD Dissertation

The dissertation is evaluated by external evaluators as per the criteria prescribed by HEC Graduate Policy-2023. If the dissertation is sent again to the same evaluator after major revision, or if it is sent to a 3rd evaluator, the evaluation fee will be borne by the student along with all

the additional charges.

Final Defense

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

Admission Test Alternates

For Bachelors Programs

Applicants may submit a minimum 1100/1600* score of SAT 1. The scoring of SAT 1 will be considered as follows;

SAT score	Test Marks
1500 – 1600	50
1400 – 1499	45
1300 – 1399	40
1200 – 1299	35
1100 – 1199	30

*Candidates securing 100% marks in SZABIST's admission test will be equivalent to 50.

For Masters Programs

50% score of GMAT for Master Programs.

For MS Programs

- GAT (General)/HAT relevant with minimum 50% score. OR
- GRE (General) with a minimum cumulative score of 300.

For PhD Programs

- GAT (Subject) with minimum 60% score OR
- GRE (Subject) with minimum score of 640 score.

SZABIST University's own GAT Subject test may be cleared with minimum 60% score in lieu of GAT Subject for PhD Management Sciences only.

Transfer Policies

Transfer into SZABIST University, Islamabad Campus 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 University, Islamabad Campus admission requirements.

ADMISSION REQUIREMENTS

Bachelor Course Transfer

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

MPM Course Transfer

A maximum of up to 6 credits may be considered for transfer into the MPM 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 University) program are transferable into the regular MBA program subject to the eligibility criteria of the MBA program at SZABIST University.

EMBA Course Transfer

A maximum of up to 33 credits may be considered for transfer into the EMBA program. Capstone Project and Thesis credits are not transferable.

MS Course Transfer

Maximum 50% of course work may be transferred which was done within the last two years from the date of admission subject to fulfilling minimum CGPA and other requirements.

PhD Course Transfer

Maximum 50% of course work may be transferred which was done within the last one year from the date of admission subject to fulfilling minimum CGPA and other requirements.

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 by 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 program except for MS or equivalent.

- For MS, Maximum 2 Certificate Courses may be transferred which were done within the two years from the date of admission subject to fulfilling minimum CGPA and other requirements.
- For PhD, Maximum 2 Certificate Courses may be transferred which were done within the last one year from the date of admission subject to fulfilling minimum CGPA and other requirements.

The minimum letter grade of Certificate courses from SZABIST which are transferable to regular degree programs are as follows

- Bachelor's programs: C and above grades
- Master's programs: C+ and above grades
- MS Programs: B- and above grades
- PhD Programs: B and above grades

Financial Assistance

SZABIST offers financial assistance to eligible and deserving students in the form of various SZABIST funded and external donor-funded scholarships as under:

- SZABIST Need-Based Scholarship
- SZABIST Merit-Based Scholarship
- SZABIST General Scholarship
- SZABIST Employee Children Fee Concession
- SZABIST Employee Continuing Education Scholarship
- USAID Funded Merit and Need-Based Scholarship
- Sindh Education Endowment Fund Scholarship
- Balochistan Education Endowment Fund Scholarship (Partial Funded / Fully Funded)
- HEC-Indigenous PhD 5000 Fellowship Program
- Orange Tree Foundation Scholarship
- Higher Education Opportunities for the students of Balochistan & FATA
- Various Community-Based Scholarship

SZABIST also offers loan facilities as under:

- Ihsan Trust Interest-Free Loan Facility (Qarz-e-Hasna)
- The Citizens Foundation Financial Assistance

LIFE AT SZABIST

FACILITIES

Video Conferencing

SZABIST University is the first educational institute in Pakistan that introduced multi-point interactive Video Conferencing (VC) technology in 2001. SZABIST University regularly uses VC technology in interactive learning sessions among Dubai, Islamabad, Larkana, Ghara, 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 University 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 regularly. These seminars and lectures are in continuation of SZABIST University 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

SZABIST University also offers several productivity- based 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 have 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 for removing deficiencies, if any. These courses include Business Communication, Technical Writing, Public Speaking, Personality Grooming, Interviewing Techniques and learning of Statistical Package for the 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 with electricity backup through UPS.

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

SZABIST has computing facilities supported with 24x7 broadband connectivity of 240 Mbps committed bandwidth to the internet and intranet. SZABIST University, Islamabad campus is Wi-Fi enabled since 2002. Two new computer labs are added to the existing labs infrastructure. Students and guest are welcome with their BYOD and can access all network available resources wirelessly. SZABIST University has also acquired Microsoft IT academy and Oracle Academic Alliance program.

A dedicated Lab for Management Science program is established for research development and training purpose for students of MS and PhD program. This lab is equipped with high speed computers for students.

SZABIST University, Islamabad campus has commissioned Robotics and Artificial Intelligence lab equipped with tremendous high speed GPU. These are connected with SZABIST network through Wi-Fi and brand bend to cater students assignments and projects.

SZABIST University, Islamabad campus library holds a rich collection of books, Journals, Magazines, and a large number of digital libraries and online databases. The Library has 25 workstations through which students can access an unlimited number of journals and magazines. This facility is further extended to registered students through the network on demand. SZABIST library provides comfortable physical spaces and furniture with a peaceful environment.

LIFE AT SZABIST

Research Committee (RC)

SZABIST places high emphasis on research & 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 regularly and discusses and recommends the individual cases of all such students pertaining to approval of their research work, selection of supervisors, co-supervisors, examiners, evaluators (national and foreign), provides approval for conduction of pre-defense seminars & open defense, and all other related activities. The DC also ensures the research work that carries its value to the society and is free from any un-ethical matters. In this regard, Institutional Ethical Review Board (IERB) work under the supervision of DC.

Board of Advanced Studies and Research (BASR)

The objective of BASR is to facilitate and monitor Academic Research at MS and Ph.D. levels and to regulate policies related to Research Publications. The BASR discusses and approves or disapproves the recommendations forwarded by Doctoral and Research Committees across all campuses of SZABIST University. The board proposes by-laws and policies regarding MS & PhD programs and the initiation, execution, and award of research degrees. It also provides approvals on the appointments of supervisors for MS and PhD research students and endorses titles and synopses for the theses or dissertations.. The decisions taken in BASR are ratified in the Academic Council.

The frequency of BASR's meetings is twice a year. BASR's meetings are chaired by the Vice President Academics and its secretary is the Registrar. The members of BASR include Deans, HoCs, HoDs and External experts from academia or industry.

Academic Council

The Academic Council is the highest academic statutory body of SZABIST University. The Council is empowered to approve or disapprove any agenda item forwarded through a due process to it. The agenda items are generally related to introduction of new program, changes in existing program structure, introduction of new courses, revision in course outlines, policy framework related to entry and exit of students and policy matters pertaining to research and development. The agenda items are first prepared at the departmental level and presented in the Board of Studies (BOS) meetings, chaired by the HODs (Head of Departments). All departments at all campuses conduct similar meetings at their respective campuses. Item approved by BOS across all campuses are forwarded to the relevant Dean, who compiles all BOS meeting's agenda and circulates the same to relevant departments under him/her.

Agenda items are thoroughly deliberated at this level. All HODs across campuses and their designated BOF members attend the BOF meetings, which are chaired by the relevant Deans. BOF meetings include some external members from academia and industries as well. The approved items from all BOF meetings are forwarded to the Registrar through Vice President (Academics). The registrar is the secretary of the Academic Council (AC), who compiles all the BOF-forwarded agenda items at one place and circulates it to all the members of the Academic Council. If the agenda items are related to Research work or research related policies, these are included for discussion in the Board of Advanced Study and Research (BASR) meetings. BASR agenda booklet also include the approved items of Doctoral Committee (DC) and Research Committee (RC).

The frequency of AC and BASR meetings is twice a year. AC meetings is chaired by the President and Co-chaired by Vice President Academics. BASR meetings are chaired by the Vice President Academics. The members of AC & BASR include Deans, Registrar, HoCs, HoDs and external experts from academia and industry.

Office of Research Innovation and Commercialization (ORIC)

The global knowledge economy has strengthened the need for strategic partnerships that go beyond their traditional roles as collaborators. World-class research universities are at the forefront of pioneering such partnerships. The Office of Research Innovation and Commercialization (ORIC) is being established to link research and commercialization at

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SZABIST with emerging and existing firms across Pakistan and around the world.

The mission of ORIC as outlined by HEC is “Transforming Pakistani universities to drive high impact innovation, applied research and entrepreneurship”. The ORIC’s vision is to enable and lead Pakistan’s transformation to a knowledge-based economy dependent upon innovation and entrepreneurship. It serve as a bridge between multiple faculties of SZABIST and produces quality research and innovative products for filing patents/trademarks / designs. As an umbrella, ORIC is meant to work closely with the researchers and on campus Incubators and S&T Park.

The ORIC office also serves as a conduit to local, regional and federal partners to ensure that research results aid the growth of Pakistan’s economy. It provide assistance to faculty members and research students in producing research article/projects at national as well as international level and arranges periodic workshop / training / seminar / conferences. ORIC is meant to work on commercialization of research and helping startups to incubate, grow, create new jobs, products, services, markets, carry out innovation and bring in funding. The following are the prime activities of ORIC at SZABIST:

- Managing applied research, innovation and commercialization activities within the universities through industrial collaboration;
- Intellectual Property Commercialization through documentation, evaluation, protection, marketing, licensing and royalties agreements;
- Partnership with national / foreign universities, government departments, and non- government organizations for reports, publication, contracts and consultancies;
- Participate in government programs and in securing funding for research from public and private sector;
- Organizing training, workshop, seminars, focus group discussions for maintaining academia - industry linkage as well as capacity development;
- Help final year students through startups and joint ventures.

Data Centre

The Data Center has been designed with the Telecommunication Industry Association’s (TIA-942) Tier-II international infrastructure standards including raised flooring, redundant HVAC precision units, fire detection, alarm & suppression system, precision UPS & power system, CCTV and access control system for remote monitoring. The Data Center is

responsible for providing LAN & WAN connectivity, Web Services, Video Conferencing, hosting private cloud services and Server Farm (including Domain Controllers, Proxy, Email, Web, Network Management, Electronic Bulletin Board, ZABDESK ERP and many more) and other related services of all five campuses, ZABTECH and IMC.

Computing Resources

Computing resources of the data center is comprising of 20 TFLOPS of processing speed with high performance and reliable 100 Tera Bytes of storage capacity. The data center is equipped with UPS backup and 12-ton redundant precision cooling system for reliability of data center and protected by FM-200 based Automatic Fire Detection and Suppression System and manual fire extinguishers. CCTV cameras and Access Control systems are intact for effective surveillance and restricting unauthorized access to the facility.

Campus Network Infrastructure

Campus network is based on n-tier architecture which includes security, core, distribution and access layers. The backbone comprises three upper layers i.e. security, core and distribution as well as primary & backup fibre optic link connectivity for all buildings. In Data Center, redundant Chassis-based routers, core and distribution switches and firewalls with high transmission rate are commissioned, where device and link redundancy has been maintained at every level to ensure un-interrupted ICT services to users. Gigabit Access Network has also been commissioned to ensure high-speed computing at user end, where access switches of high switching capacity are installed to handle data and multimedia traffic, efficiently. Proper NMS server installed to monitor and manage the whole network infrastructure, which can send alert on any fault, performance bottleneck and/or security issues.

Wireless Mesh Network

A secured Wi-Fi mesh network has been implemented throughout the campus. Wireless indoor and outdoor Access Points (APs) have been installed to give internet/intranet access to students, faculty and staff employs latest wireless protocol 802.11n with each AP providing a bandwidth up to 300 Mbps to the users.

Newsletters

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

LIFE AT SZABIST

ZABFM DIGITAL

(www.zabfm.org)

ZABFM digital is a streaming simulcast radio station exclusively to impart and disseminate education for the students around the world via www.zabfm.org and ZABFM DIGITAL (Play store). An initiative taken by Shaheed Zulifkar Ali Bhutto Institute of Science & Technology and it was a 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 knowledge through the airwaves. The 24/7 programming schedule covers various subjects of life like, Career Counseling, Planning & Development, Education, Infotainment, Awareness, Research, Documentaries, Talk Shows, Sports, Travel, Science & Technology, Media, Culture & Society, Technology & Inventions, Info-tech and social order, etc.

Quality Enhancement Cell (QEC)

Quality Enhancement Cell at SZABIST is created to foster Institutional Effectiveness (IE), to support planning, policy formation, streamlining processes, decision making and critical academic initiatives of strategic importance to the institute in all core departments. QEC activities include promoting and developing QA processes for monitoring and evaluation of programs.

Student Support Services

For more than a decade (2009-to date), the Islamabad campus of SZABIST has been fortunate to have a unique and diverse student body with a healthy record of activities and a proud history of achievements. Since 2014, with the establishment of the Department of Student Support Services a more organized and focused approach has been adopted with the aid of student advisory policies and guidelines for activities in the form of standard operating procedures and financial prudence guidelines with emphasis on paperwork and documentation/reports for record keeping all of which added much needed structure to student activities at the institute. The Student Advisory Office and the Executive Development Centre (EDC) work under the SSS.

In 2015, the same system was gradually introduced at other campuses of SZABIST and by now they have all had annually elected student council bodies.

The Student Support Services aim to provide students with a platform that allows them to conduct activities which work towards the development of a stronger, wiser and a more united student populace. It works to

inculcate in young minds the values of unity, tolerance, inclusion and leadership and through engagement with other campuses of SZABIST and universities across the country realize the objectives of our core areas of focus, nationally as well.

The Student Support Services has an Office of Student Advisory and the Student Career Services and Alumni Relations working under it.

The Office of Student Advisory

The Office of Student Advisory / Affairs provides guidance on all extra-curricular activities that take place on campus. The Student Affairs Advisor:

- Manages and supervises overall activities of Student Societies and SZABIST Student Council (SSC) at SZABIST.
- Acts as a liaison between the SSC and the management of SZABIST University, Islamabad campus.
- Ensures that SSC and its societies' activities are held in compliance with the SSC constitution, financial and administrative procedures and SZABIST management guidelines.
- Arranges student activities within and outside campus through Activities Coordinators and staff of the Department of Student Support Services.
- Counsels students regarding their behaviour and general guidance and helps them to understand their potential and ways to pursue their goals.
- Certain cases may be referred to Head of Student Support Services or Vice President (Academics).

SZABIST Student Council (SSC)

Established in 2015, SSC has been a union of hardworking, ambitious and talented individuals across all programs of SZABIST elected under the Election Commission of SZABIST. The selection of SSC workforce is by means of an entrance test and screening process all on an annual basis to form the student government at the institute, under the supervision of Student Advisor, Student Council and Election Commission at SZABIST.

SSC aims at helping to explore the talents of all students whilst, along with playing an intermediary role between the administration and student body at large, working towards adding value to student life at SZABIST.

Moreover, it organizes and hosts seasonal entertainment events to encourage networking among students, staff members and the faculty. Along with entertainment, SSC

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has history of organizing various Conferences, Seminars and Workshops to connect students with the industry and learn from their experiences.

The Executive Board of SSC is the central leadership organization within the Council. The Board consists of the President (SSC), the Vice President (SSC), the Secretary General (SSC) and the Treasurer (SSC). The agenda of each year is reviewed by the Executive board for the 5 pillars attached to SSC elaborated below.

The Leadership Pillar cultivates a sense of self-awareness amongst students through the identification of core strengths, vision, aims and values to become a leader and effectively lead change, conflict resolution, team motivation and reflective thinking skills. The following societies/club are working under the leadership pillar:

1. ZABMUN Society
2. Character Building Society
3. MBA Club

The Sports Pillar enables students to achieve excellence in sports which increases physical health of students and improves team work, coordination, cooperation, and mental health. The Sports Society at SZABIST holds various activities to keep the students energetic and active. The following societies are working under the Sports pillar:

1. Sports Society
2. Gaming Society
3. Adventure Society
4. Society for Voluntarism

The Arts and Culture Pillar flows creative ethos of students with intellectual and aesthetic understanding of the craft and technique of theatre arts and humanity. The following societies are working under the Arts and Culture pillar:

1. Literature & Mushaira Society
2. Photography Society
3. Drama Society
4. Curtains Society
5. Literature & Detabating Society
6. ZAB Life Club

The Community Service Pillar holds focal players in Pakistan's fight against climate change inculcating the message of sensitivity, inclusivity and equality in all activities. The following societies are working under the Community Service pillar:

1. Environment & Climate Change Society
2. SZABIST Social Sciences Society
3. Community Services & CSR Society
4. Wellness Clinic
5. Z4S SZABIST for Sustainability Society

The Professional and Technical Pillar develops a set of professional skills which refine and improve the technical skills of mathematics, science and engineering onto different areas such as economic, environmental, social, political and sustainable development. The following societies are working under the Professional and Technical pillar:

1. IEEE Society
2. Entrepreneurship Society
3. Media Society
4. CS-SE Society
5. Social Science Society
6. Google Developers Student Club
7. Finance Club
8. Mircorsoft Learn Student Ambassador Community

All student associations, clubs and student societies are formed as per a prescribed procedure working under the aegis of the SZABIST Student Council. Student Council members have rock solid history of conceptualizing and leading projects and events which work to advance the social and civic development of not only the student body but also of the community.

SZABIST Student Career Services & Alumni Relations

The Executive Development Center (EDC) at 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, webinars, Zabtalk sessions and presentations by industry experts who share their experiences to help them understand the transition from campus to the corporate world.

SSCS & AR compiles students' profiles and publishes the annual graduate directory in order to provide graduates from SZABIST to credible organizations.

SSCS & AR engages with the Alumni for relationship building, corporate networking and profile update. A body with a name SZABIST Alumni Global Association (SAGA) is there to build strong bond with alumni. The vision of

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SAGA is “To empower the SZABIST Alumni for exploring new avenues and expanding knowledge for continuing their journey of self-discovery”.

Job & Internship Placements

In collaboration with the industry, SSCS & AR arranges job/internship recruitment drives and management trainee programs by reputable national and multinational companies. SSCS & AR 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 market, 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 pre-requisite for their degree completion.

ZABSolutions

SZABIST has its own software house that fulfills the software needs of the SZABIST. The state-of-the-art applications that ZABSolutions has developed and evolved are successfully supporting and fueling the complete academic process of the SZABIST. The documentation process flow with students progression at SZABIST from filling the online admission form to the printing of transcript and degree and profiles of each student is available on ZAB LMS (ZAB Learning Management System). Several educational institutions in Pakistan have shown their interest in ZAB LMS.

The ZABSolutions incubator help students foster their software skills. Students can access ZABSolutions’ resources

and knowledge to develop their skills and competencies, which are important to compete in the market. Following are the objectives of the incubator:

1. Provide a practical framework for knowledge and technology transfer to the students
2. Develop the confidence and competencies for building e-firms
3. Involve students in software research and development
4. Enhance partnership between industry and academia
5. Provide faculty and the students with innovative support facilities

National and International Linkages and Collaborations

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

1. International Association of Universities (IAU), Paris
2. The Association to Advance Collegiate School of Business (AACSB), Singapore
4. Asia-Pacific Quality Network (APQN), People’s Republic of China
5. The Talloires Network, USA
6. The Chartered Institute of Logistics and Transport (CILT), UK
7. Management Association of Pakistan (MAP), Karachi
8. 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. **Association of Chartered Certified Accountants**
ACCA, UK

This MoU provides exemption from ACCA papers to graduates of SZABIST in Bachelors of Business Administration (BBA) and BS Accounting & Finance.

2. **Balochistan Education Endowment Fund Scholarship.**
Under this MoU, Government of Balochistan is providing fully funded scholarship to 5-6 meritorious and financially needy students of SZABIST who are local domicile certificate holders of Balochistan. The scholarship covers the entire duration of the degree program.

3. **CISCO Networking Academy**

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

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4. Coventry University, UK

Through this MoU, SZABIST students enrolled in Bachelors of Arts in Business Studies (BABS) are conferred Coventry University degree on completing two years of education at SZABIST and one year at Coventry University, UK.

5. Leverify, LLC.

SZABIST Islamabad signed MoU with Leverify, LLC, on October 07, 2022. This MoU aims to highlight the importance of collaboration between industry and academia that promotes innovation and growth in technology. Industry partnerships are instrumental in advancing research and creating a skilled workforce.

6. Universiti Teknologi MARA UiTM, Malaysia

SZABIST Islamabad signed MoU with Universiti Teknologi MARA (UiTM), Malaysia, on November 14, 2022. This MOU aims to enable collaboration in faculty and student exchange, collaborative research, co-teaching, professional training, joint industrial projects, and knowledge creation in the joint pursuit of quality education.

7. Mitsubishi Corporation, Japan

Mitsubishi Corporation through this MoU provides 100% scholarship to the students enrolled in the Media Science BSMS program annually.

8. Islamabad Traffic Police

SZABIST Islamabad signed MoU with Islamabad Traffic Police (ITP) on December 20, 2022, aiming to establish a relationship between SZABIST and ITP officials. SZABIST students will visit different educational institutions in Islamabad to deliver presentations/ lectures on road safety to students, professionals and non-professional drivers. Volunteer students will be made aware of radio-related affairs, production, recording and other aspects of FM 92.4 radio.

9. Stand for Peace Trust

SZABIST Islamabad signed MoU with Stand for Peace Trust (SFP) on February 7, 2023. The purpose of this MoU was to organize and manage the workshops on Environmental Management, New Environment Technologies, and Environmental Challenges and organize large-scale Plantation Drives. SZABIST Students get exposure to work with Environmental Research Specialists, field experiences, surveys, etc.

10. Fauji Foundation Overseas Employment Services (FF OES)

SZABIST Islamabad signed MoU with Fauji Foundation Overseas Employment Services (FF OES) on May 29, 2023. The primary objective of this collaboration is to generate employment opportunities, with a specific focus on the IT sector, for both alumni and referred candidates. Both institutions are working to cooperate, benefiting the candidates' careers, and fostering a stronger relationship between SZABIST Islamabad and Fauji Foundation.

11. International Consulting Associates Pvt. Limited

SZABIST Islamabad signed MoU with International Consulting Associates Pvt. Limited on June 23, 2023. This partnership aims to train and employ 1,500 young individuals from Sindh in cutting-edge digital skills and internet e-commerce technologies under the Youth Education, Employment & Empowerment Project (YEEEP) in Sindh.

12. The Chartered Institute of Logistics and Transport (CILT), UK

The Chartered Institute of Logistics & Transport (CILT) is the leading professional body associated with logistics and transport, having over 35,000 members in over 100 countries worldwide. SZABIST has signed a MoA with CILT for launching a Levels 5 Professional Diploma in logistics and transport. To attain this Diploma, a total of five mandatory courses have to be completed.

13. University of London, UK

SZABIST is a registered center of University of London for giving tuitions for its LLB program.

14. Chartered Institute of Management Accountants (CIMA)

SZABIST BSAF, BBA, BABS, BSENT, EMBA, and MBA (non-finance electives) students and alumni will be exempt from all 13 courses and will only attempt three case studies. MBA students with finance electives and BS (Accounting & Finance) alumni will be exempt from all 13 courses and operational-level case studies and will only attempt two case studies. BSAF students are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies.

15. Institute of Chartered Accountants of Pakistan (ICAP)

As per agreement, Graduates of BS (A & F) will get exemptions in nine papers of Institute of Chartered Accountants of Pakistan (ICAP).

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SZABIST also offers 2.5-year Bachelor of Science (Accounting & Finance) program exclusively for CAF qualified students of the Institute of Chartered Accountants of Pakistan (ICAP). CAF qualified students are exempted from 60 credit hours / 20 course while they have to complete remaining 78 credit hours (26 courses) and a 6 credit hours Final Year Project.

16. Greenstar Social Marketing Pakistan Limited

Through this MoU, SZABIST and Greenstar Social Marketing have decided to collaborate in research pertaining to Family planning and child health.

17. Iqra University, Islamabad

A Memorandum of Understanding was signed between SZABIST Islamabad and Iqra University Islamabad on June 23, 2021 to organise guest lectures seminars, and training sessions of mutual interest.

18. Shifa Foundation, Islamabad

SZABIST Islamabad signed an MoU with Shifa Foundation on August 03, 2021 to engage students in community development and other environmental programs while honorary internships (general and clinical) would be provided to SZABIST students.

19. Subway Centaurus, Islamabad

Subway Centaurus and SZABIST Islamabad signed a memorandum of understanding on September 10, 2021 to collaborate in joint market research projects, Special discount will be given to SZABIST employees and students.

20. SZABIST and PMI

SZABIST, Islamabad took a giant step forward on June 3rd, 2016 towards enhancing the Project Management program by signing an MoU with Project Management Institute Islamabad Chapter Pakistan (PMI-IPC) for promoting cooperation in exchange of information, joint research and development of academic programs concerning Project Management, and also exchange of experts and researchers. The strategic partnership is expected to be a way forward in bridging the gap between industry and academia.

21. Higher Education Commission (HEC)

SZABIST signed MOU with HEC on January 15th, 2019 for establishing EDUTV of HEC with studio departments of five universities including SZABIST. SZABIST and HEC ensured continued support on agreed scope of cooperation.

22. Pakistan Centre for Philanthropy (PCP)

SZABIST signed MOU with PCP on March 27th, 2019 to promote collaboration in academic research and to showcase Pakistani nonprofits through various means including video documentation. The parties will plan educational and training activities of mutual interest. It also aims to provide internship opportunities at PCP to graduate students of SZABIST.

23. Pakistan Air Force (PAF) Hospital, Islamabad

SZABIST Islamabad signed MoU with PAF Hospital on October 21st, 2021. The PAF hospital will provide OPD/IPD services to the SZABIST employees and staff at discounted rates. The PAF Hospital provides General and Clinical Internships to the students of SZABIST, Both parties agreed to collaborate for organizing awareness seminars, professional trainings, and conferences.

24. Nishan Rehab Pakistan

SZABIST Islamabad signed an MoU with Nishan Rehab Pakistan on January 12th, 2022 for engagement of students in areas of anti-smoking campaigns, awareness of drug addiction, and the role of youth in prevention of substance abuse disorders. Collaboration with Nishan Rehab will train students of BS/MS Clinical Psychology on 9 basic Universal Treatment Curriculums (UTCs) published by NAADAC (National Association of Alcohol and Drug Abuse Counselors) USA. Through this training, students will be capable to undertake the exam of ICAP (Internationally Certified Addiction Professionals). Furthermore, placement of Clinical Psychology students to get hands-on experience in domains of drug rehabilitation, family therapy, and therapeutic sessions for personality disorders and bipolar-related disorders, etc.

25. Rawalpindi Chamber of Commerce & Industry (RCCI)

SZABIST Islamabad signed an MoU with the Rawalpindi Chamber of Commerce & Industry (RCCI) on July 27th, 2017. Both parties agreed to work on the promotion of "Action-Based Research" concerning industry-related issues and challenges. Students will also visit industrial partners for business plans and entrepreneurial activities. Moreover, faculty and student development initiatives will also be taken in knowledge-sharing forums.

26. HADI Worldwide, Islamabad

A memorandum of agreement was signed with HADI Worldwide, Islamabad on December 17th, 2021 with the

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objective to leverage each other's strengths including human resources, equipment, venue, linkages, ideas, capabilities, opportunities, services, etc. and contributing to the effectiveness and sustainability of the educational, employability, and job production landscape of Pakistan.

27. P@SHA Islamabad

SZABIST Islamabad signed MoU with P@SHA Islamabad on January 11, 2022 aiming to hire P@SHA-recommended industry trainer and provide digital material access to students for the industry-oriented courses. P@SHA agreed to provide support in setting standards for the Final Year Projects to enhance the quality of development, documentation, and successful deployment. Support in access to the industry network for matching industry projects to students and faculty of SZABIST with IT and Its companies.

28. Islamic Relief Pakistan

SZABIST Islamabad signed MoU with Islamic Relief Pakistan on January 12th, 2022. Islamic Relief Pakistan and the SZABIST will endeavor to assist and support each other in the research and development and also to explore mutually beneficial, community-based research projects, and to develop appropriate innovative communication linkages to

facilitate information transfer. It is also mutually agreed that both parties will participate in conference(s) and seminar(s) and capacity-building workshops.

29. Pakistan Red Crescent Society (PRC)

SZABIST Islamabad signed MoU with the Pakistan Red Crescent Society (PRC) on August 17, 2023. The purpose of this MoU is to participate in national/ international events, trainings, demonstrations, workshops, seminars and camps. The students get exposure to work with the professionals in Blood Donation Camps to cope with natural and man-made disasters i.e. thalassemia, hemophilia, and cancer.

30. Zahid Latif Khan Securities (ZLKS)

On October 23, 2023, SZABIST Islamabad signed MoU with Zahid Latif Khan Securities (ZLKS). The main aim of this MoU is to offer internship and job opportunities to the students. ZLKS will support the students and faculty in conducting Business Research Projects and Community Research Services. Additionally, SZABIST students will gain exposure to the financial market, trading, and investment through this collaboration. ZLKS will also provide a volunteer program, coaching, and mentorship to the students.



FACULTY OF MANAGEMENT SCIENCES



VISION

SZABIST Faculty of Management Sciences aspires to become one of the leading entities for excellence in business education, service, research and innovation.

MISSION

SZABIST Faculty of Management Sciences is committed to:

- Produce highly qualified business professionals to meet dynamic and challenging contemporary needs;
- Generate knowledge and expertise for business and economic solutions through research;
- Create an enabling environment for corporate and entrepreneurial outlook;
- Serve the community through students, faculty, and alums.

FACULTY OF MANAGEMENT SCIENCES

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, students are required to complete 47 courses and 03 credit hours Business Project, a 02 credit hours Community Service Project and 03 credit hours Graded Internship. The students will take 4 Program Electives courses from Management, Marketing, Finance, Entrepreneurship or Supply Chain Management. To obtain the BBA degree, students have to complete 144 credit hours including a six week graded internship. Maximum time limit to complete the BBA degree is six years. BBA program is an ACCA accredited program; those who complete BBA from SZABIST, will get an exemption in 06 out of 09 ACCA Foundation papers (F1, F2, F3, F5, F7 and F9). BBA students and alumni are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies. BBA Program has been accredited by National Business Education Accreditation Council (NBEAC) and is also affiliated with Chartered Financial Analyst (CFA) Institute.

First Year

Fall Semester	Pre-Req.
BA 1108 IT in Business	----
BA 1109 Personal Management and Communication	----
BA 1203 Management Principles	----
BA 1206 Oral Communication and Presentation Skills	----
BA 1119 Islamic Studies / Humanities*	----
BA 2307 Sociology*	----
BA xxxx Ideology and Constitution of Pakistan*	----

Spring Semester

BA 1101 Introduction to Accounting	----
BA 1102 Microeconomics	----
BA 1105 English Writing Skills	----
BA 1204 Maths for Business	----
BA 2403 Business Ethics	BA 2303
BA 2312 Human Behavior	----

Second Year

Fall Semester	Pre-Req.
BA 1201 Financial Accounting	BA 1202
BA 1211 Logic and Critical Thinking	BA 1105
BA 3504 Organizational Behavior	BA 2312
BA 2303 Marketing Principles	BA 1203
BA 1202 Macroeconomics	BA 1102
BA 2406 Business and Electronic Communication	BA 1206

Spring Semester

BA 2311 Business Statistics	BA 1204
BA 2411 Cost and Management Accounting	BA 1201

Fall Semester	Pre-Req.
BA 3502 Entrepreneurship	BA 1203
BA xxxx Consumer Behavior*	BA 2303
BA xxxx Community Service Project*	----
BA xxxx Pakistan Studies*	----
BA xxxx Natural Science Elective**	----

Third Year

Fall Semester	Pre-Req.
BA 3501 Financial Markets and Institutions	BA 1201
BA 3508 Media Management	BA 2303
BA 3605 Statistical Inference	BA 2311
BA 4706 Development Economics	BA 1202
BA 2301 Introduction to Business Finance	BA 1201
BA xxxx University Elective	----

Spring Semester

BA 3601 Financial Management	BA 2301
BA 3602 Marketing Management	BA 2303
BA 3603 Business Research Methods	BA 3605
BA 3607 Operations Management	BA 1203
BA 4804 Human Resource Management	BA 3504
BA 3630 Internship/Field Experience	----

Fourth Year

Fall Semester	Pre-Req.
BA 2402 Retail Management	BA 2303
BA 3609 Pakistan Economy	BA 4706
BA 4705 Services Marketing	BA 3602
BA 4704 Management Information Systems	BA 1108

*02 credit hours courses each

FACULTY OF MANAGEMENT SCIENCES

		Pre-Req.
BA 4xxx	Program Elective-I	----
BA 4xxx	Program Elective-II	----

Spring Semester		Pre-Req.
BA 3505	Quantitative Skills	BA 1204
BA 4710	Business Project	BA 3606
BA 4801	Law and Taxation	BA 1211
BA 4814	Project Management	BA 3607
BA 4xxx	Program Elective-III	----
BA 4xxx	Program Elective-IV	----

UNIVERSITY ELECTIVE

(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 3621	Professional Development
BA 3521	Auditing
BA 3522	Social Advocacy and Community Service
BA 3622	e-Commerce*
BA 3523	Software Tools for Business*
BA 4730	Fundamentals of Artificial Intelligence*

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

Program 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 4752	Financial Reporting and Analysis
BA 4831	Portfolio and Investment Management
BA 4833	Security Analysis
BA 4834	Treasury and Funds Management
BA 4855	Financial Risk Analysis
BA 4867	Business Analysis and Forecasting*
BA 4769	Fintech
BA 4774	Alternative Investments

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
BA 4762	Digital Marketing
BA 4868	Marketing Analytics
BA 4874	e-Commerce*

Supply Chain Management

BA 4116	Supply Chain Management
BA 4126	Trade Marketing
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 4859	Product Innovation and Design

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

Entrepreneurship

BAxxx	Finance and Taxation for Entrepreneurs
BAxxx	Product Innovation and Design
BAxxx	Digital Entrepreneurship
BAxxx	Entrepreneurial Marketing
BAxxx	Family Business Management
BAxxx	Financial Venture
BAxxx	SME Management
BAxxx	Social Entrepreneurship
BAxxx	Technopreneurship

FACULTY OF MANAGEMENT SCIENCES

****Natural Science Electives**

(To be offered by the campus as Compulsory courses)

BA 3623 Agricultural Science
BA 3624 Ecology
BA 3625 Environmental Science
BA 3626 Theory of Science

Teachings of Holy Quran

All Muslim undergraduate students are required to clear **BA 1210 Teachings of Holy Quran** non-credit course to be eligible for the degree.

Graded Internship/Field Experience

The students will be required to complete a graded internship of minimum 6 weeks in 6th semester or after the 6th semester or program relevant field experience of minimum 06 months duration to qualify for the degree.

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

BS Business Analytics

SZABIST offers a four-year (eight semesters) BSBA degree program of 144 credit hours. This is an innovative program designed to blend business knowledge with advanced computing and analytical skills. For the BSBA program, students are required to complete 48 courses, a 03 credit hours Capstone Project, and 03 credit hours Graded Internship. The students will take 4 Program Elective courses from Finance, Marketing, Human Resource Management (HRM), or Supply Chain Management (SCM). To obtain the BSBA degree, students must complete 144 credit hours. The maximum time limit to complete the BSBA degree is six years.

BS BUSINESS ANALYTICS CURRICULUM

Codes	Course Title	Cr.Hrs.	Pre-Req.
First Year			
Semester - I			
BSBA xxxx	Fundamentals of IT & Business Analytics	2+1	----
BSBA xxxx	English Writing Skills & OCPS	3	----
BSBA xxxx	Management Principles	3	----
BSBA xxxx	Introduction to Accounting	3	----
BSBA xxxx	Islamic Studies / Humanities	2	----
BSBA xxxx	Sociology	2	----
BSBA xxxx	Ideology and Constitution of Pakistan	2	----
Sub-total		18	
Semester - II			
BSBA xxxx	Financial Accounting	3	Introduction to Accounting
BSBA xxxx	Marketing Principles	3	----
BSBA xxxx	Business and Technical Writing	3	English Writing Skills & OCPS
BSBA xxxx	Math for Business	3	----
BSBA xxxx	Artificial Intelligence in Business	2+1	----
BSBA xxxx	Programming for Business 1	2+1	----
Sub-total		18	
Second Year			
Semester - III			
BSBA xxxx	Environmental Science and Sustainability for Business	3	----
BSBA xxxx	Logic, Critical Thinking and Decision Science	2+1	----
BSBA xxxx	Organizational Behaviour	3	Management Principles
BSBA xxxx	Microeconomics	3	----
BSBA xxxx	Business Statistics	3	Math for Business
BSBA xxxx	Programming for Business 2	2+1	Programming for Business 1
Sub-total		18	

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Codes	Course Title	Cr.Hrs.	Pre-Req.
Semester - IV			
BSBA xxxx	Data Structures & Business Applications	2+1	Programming for Business-2
BSBA xxxx	Introduction to Business Finance	3	----
BSBA xxxx	Calculus for Business	3	Math for Business
BSBA xxxx	Community Service Project / Civic Engagement	2	----
BSBA xxxx	Technopreneurship / Entrepreneurship and Innovation in Analytics	2	----
BSBA xxxx	Pakistan Studies	2	----
BSBA xxxx	Macroeconomics	3	Microeconomics
Sub-total		18	

Third Year

Semester - V			
BSBA xxxx	Business Ethics	3	----
BSBA xxxx	Marketing Management	3	Marketing Principles
BSBA xxxx	Data Visualization and Storytelling	3	----
BSBA xxxx	Database Management Systems for Business	2+1	Data Structures
BSBA xxxx	Introduction to Econometrics	3	Business Statistics
BSBA xxxx	Advanced Business Analytics	2+1	Artificial Intelligence in Business
Sub-total		18	

Semester - VI

BSBA xxxx	Human Resource Management	3	Organizational Behaviour
BSBA xxxx	Islamic Banking and Finance	3	----
BSBA xxxx	Business Research Methods	3	----
BSBA xxxx	Predictive Analytics for Business	2+1	Inferential Statistics
BSBA xxxx	Financial Management	3	Introduction to Business Finance
BSBA xxxx	Auditing	3	----
Sub-total		18	

Fourth Year

Semester - VII			
BSBA xxxx	Business Intelligence Tools and Techniques for Big Data	2+1	Predictive Analytics for Business
BSBA xxxx	Machine Learning for Business Analytics	2+1	Predictive Analytics for Business
BSBA xxxx	Capstone / Business Project	3	----
BSBA xxxx	Services Marketing	3	----
BSBA xxxx	Program Elective-I	3	----
BSBA xxxx	Program Elective-II	3	----
Sub-total		18	

Semester - VIII

BSBA xxxx	Project Management	3	----
BSBA xxxx	Business Forecasting and Simulation	2+1	----
BSBA xxxx	Business Data and Text Mining	2+1	Machine Learning for Business Analytics
BSBA xxxx	Internship / Field Experience*	3	----
BSBA xxxx	Program Elective-III	3	----
BSBA xxxx	Program Elective-IV	3	----
Sub-total		18	
Total		144	

Teachings of Holy Quran

All Muslim undergraduate students are required to clear **BSBA xxxx Teachings of Holy Quran** non-credit course to be eligible for the degree.

FACULTY OF MANAGEMENT SCIENCES

University Electives

BSBA xxxx Software Tools for Business*
BSBA xxxx Auditing
BSBA xxxx Graphic Design for Multimedia*
BSBA xxxx Current Affairs
BSBA xxxx World Economy
BSBA xxxx Foreign Languages
BSBA xxxx Cost and Management Accounting

Finance Electives

BSBA xxxx Financial Data Analytics
BSBA xxxx Financial Modelling
BSBA xxxx FinTech
BSBA xxxx Forensic Analytics
BSBA xxxx Financial Econometrics
BSBA xxxx Risk Analytics for Financial Services
BSBA xxxx Blockchain and Analytics

Marketing Electives

BSBA xxxx Marketing Analytics
BSBA xxxx Social Media Analytics
BSBA xxxx Marketing Research
BSBA xxxx Digital Marketing
BSBA xxxx Consumer Insights and Analytics
BSBA xxxx E-Commerce

Supply Chain Management Electives

BSBA xxxx Dynamics of Logistics and Distribution
BSBA xxxx Supply Chain Management Analytics

HRM Electives

BSBA xxxx Performance Appraisal
BSBA xxxx Talent Management
BSBA xxxx HR Analytics
BSBA xxxx Performance Management Analytics

Graded Internship/Field Experience

The students will be required to complete a graded internship of minimum 6 weeks in 8th semester or program relevant field experience of minimum 06 months duration to qualify for the degree.

FACULTY OF MANAGEMENT SCIENCES

BS Accounting & Finance

BS (A&F) is a four-year (eight semesters) program and consists of 144 credit hours of teaching. Students are required to complete 48 courses, 3 credit hours Capstone Project, and 3 credit hours graded internship to graduate. The maximum duration to complete this degree program is six years. Graduates of BS A&F will get exemptions in nine papers of both Institute of Chartered Accountants of Pakistan (ICAP) and Association of Chartered Certified Accountants (ACCA), UK. BS A&F students are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies. Whereas, BS (A&F) alumni will be exempted from all 13 courses and operational level case studies and will only attempt two case studies.

Students of BS A&F have the option to take:

- Finance as Major and Accounting as Minor
- Accounting as Major and Finance as Minor

First Year

Fall Semester		Pre-Req.
AF 1101	Business Mathematics	----
AF 1102	Computer Concepts and Applications	----
AF 1104	Introduction to Financial Accounting	----
AF 1108	Ideology and Constitution of Pakistan*	----
AF 1109	English Comprehension & Oral Communication	----
AF 1111	Islamic Studies/Humanities*	----
AF 1112	Sociology*	----

Spring Semester

AF 1201	Advanced Financial Accounting	----
AF 1211	Business Management	AF 1104
AF 2301	Business and Technical English Writing	AF 2409
AF 2405	Principles of Microeconomics	----
AF xxxx	Personal Management and Professional Development*	----
AF xxxx	Pakistan Studies*	----
AF xxxx	Human Behavior*	----

Second Year

Fall Semester		Pre-Req.
AF 1202	Calculus for Business Studies	AF 1101
AF 1212	Essentials of Marketing	----
AF 2302	Cost Accounting	AF 1201
AF 3501	Accounting and Financial Information Systems	----
AF 3505	Principles of Macroeconomics	AF 2405
AF 4703	Introduction to Business Finance	----

Spring Semester		Pre-Req.
AF 2401	Management Accounting	AF 2406
AF 2404	Money and Banking	AF 2404
AF 2406	Statistics and Probability	----
AF 2411	Entrepreneurship	----
AF 3503	Business Ethics	AF 2401
AF xxxx	Natural Science Elective**	----

Third Year

Fall Semester

AF 3506	Statistical Inference	----
AF 3507	Financial Institutes and Markets	AF 3607
AF 3511	Auditing -I	AF 3506
AF 3606	Taxation	AF 3511
AF 3607	Corporate Accounting	AF 4703
AF 3608	Islamic Banking and Finance	----

Spring Semester

AF 2408	Business Analysis and Forecasting	AF 2302
AF 3605	Financial Reporting	AF 3505
AF 3609	Business Research Methodologies	----
AF 3611	Auditing-II	----
AF 4702	Financial Management	----
AF 4812	Internship/Field Experience***	AF 1206

*02 credit hours courses each

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Fourth Year

Fall Semester	Pre-Req.	Spring Semester	Pre-Req.
AF 2305 Organizational Behavior	AF 1107	AF 4707 Company Law	----
AF 4701 Business and Labor Law	----	AF 4711 e-Commerce and Management Information System	AF 3609
AF 4712 Capstone Project	----	AF 4806 Human Resource Management	AF 2305
AF 4801 Corporate Finance	AF 4702	AF 4807 Marketing of Financial Services	----
AF 4xxx Finance/Accounting Elective-I	----	AF 4xxx Finance/Accounting Elective-III	----
AF 4xxx Finance/Accounting Elective-II	----	AF 4xxx Finance/Accounting Elective-IV	----

Bachelor of Science in Accounting & Finance (BS A&F) 2.5-Year Program

SZABIST also offers 2.5-year Bachelor of Science in Accounting & Finance (BS A&F-2.5) program exclusively for CAF qualified students of the Institute of Chartered Accountants of Pakistan (ICAP). CAF qualified students are exempted from 60 credit hours (20 course) of course work and have to complete 78 credit hours (27 courses) of course work, 3 credit hours Capstone Project, and 3 credit hours graded internship.

Students of BS A&F 2.5 year have the option to take:

- Finance as Major and Accounting as Minor
- Accounting as Major and Finance as Minor

First Year

Fall Semester	Pre-Req.
AF 1108 Ideology and Constitution of Pakistan *	----
AF 1111 Islamic Studies/Humanities*	----
AF 1112 Sociology*	----
AF 1202 Calculus for Business Studies	----
AF xxxx Natural Science Elective**	----
AF 3503 Business Ethics	----
AF 2404 Money and Banking	----

Spring Semester

AF 2401 Management Accounting	----
AF 2411 Entrepreneurship	----
AF 3501 Accounting and Financial Information Systems	----
AF 3506 Statistical Inference	----
AF 1213 Human Behavior*	----
AF xxxx Pakistan Studies*	----
AF 2409 Personal Management and Professional Development	----

Second Year

Fall Semester	Pre-Req.
AF 1212 Essentials of Marketing	----
AF 2408 Business Analysis and Forecasting	----
AF 3507 Financial Institutes and Markets	----
AF 3608 Islamic Banking and Finance	AF 2404
AF 4801 Corporate Finance	AF 4702
AF 4702 Financial Management	----

Spring Semester

AF 3609 Business Research Methodologies	AF 3506
AF 4806 Human Resource Management	----
AF 4812 Internship/Field Experience	----
AF 4xxx Finance/Accounting Elective-I	----
AF 4xxx Finance/Accounting Elective-II	----

*02 credit hours courses each

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Third Year

Fall Semester

	Pre-Req.
AF 4711 e-Commerce and Management Information System	----
AF 4712 Capstone Project	----
AF 4807 Marketing of Financial Services	----
AF 4xxx Finance/Accounting Elective-III	----
AF 4xxx Finance/Accounting Elective-IV	----

**Minor and Major courses for
BSAF-4 year and 2.5 year programs**

Accounting Minor Courses

AF 2302	Cost Accounting*
AF 2401	Management Accounting
AF 3605	Financial Reporting*
AF 3607	Corporate Accounting*

Finance Minor Courses

AF 3606	Taxation*
AF 3608	Islamic Banking and Finance
AF 4702	Financial Management
AF 4703	Introduction to Business Finance*

PROGRAM ELECTIVES

Accounting Major

AF 4721	Advanced Audit and Assurance
AF 4722	Advanced Performance Management
AF 4723	Forensic Accounting
AF 4732	Tax Crime and Fraud Investigation
AF 4735	Accounting for Islamic Finance
AF 4821	Public Sector Accounting
AF 4822	Strategic Business Reporting
AF 4831	Forensic Analytics
AF 4835	Advanced Taxation

Finance Major

AF 4724	Advanced Financial Management
AF 4725	Analysis of Investment and Management of Portfolios
AF 4726	Behavioral Finance
AF 4727	Dynamics of Banking
AF 4728	Financial Modeling
AF 4729	Financial Econometrics
AF 4731	Fraud and Risk Management in Financial Institutions
AF 4733	Alternative Investments
AF 4734	Financial Derivatives
AF 4823	Financial Risk Analysis

AF 4824	Financing of SME
AF 4825	International Finance
AF 4826	Quantitative Data Analysis
AF 4828	Treasury and Funds Management
AF 4829	Fintech
AF 4832	Financial Data Analytics
AF 4833	Investment Banking
AF 4834	Islamic Insurance-Takaful

**Natural Science Electives are:

AF 1116	Agricultural Science
AF 1117	Ecology
AF 1118	Environmental Science
AF 1119	Theory of Science

Teachings of Holy Quran

All Muslim undergraduate students would be required to clear **AF1210 Teachings of Holy Quran** noncredit course to be eligible for the degree.

***Graded Internship/Field Experience

The BSAF 4-Year students will be required to complete a graded internship of minimum 6 weeks in 6th semester or in summers after the 6th semester and BSAF-2.5 Year students will be required to complete a graded internship of minimum 6 weeks in 4th semester or in summer after the 4th semester or program relevant field experience of minimum 06 months duration as per HEC Undergraduate Policy 2023 to qualify for the degree.

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.



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MBA Program

For students with 4-year undergraduate degree/16-years of education, the minimum duration of the MBA program is 2 years. Twenty-two courses (66 credit hours) and 6 credit hours of Research Project or Thesis spread over two semesters (3+3) are required to complete the program. Students are also required to complete a six-week internship. The maximum duration to complete MBA program is 4 years. MBA Program is also accredited by National Business Education Accreditation Council (NBEAC).

MBA (non-finance electives) students and alumni are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies. MBA students with finance electives and alumni are exempted from all 13 courses and operational-level case studies and will only attempt two case studies.

MBA (Supply Chain Management) students are exempted from four courses of the Chartered Institute of Logistics & Transport (CILT) Level 5 Professional Diploma and they are required to pass only one additional course.

First Year

Fall Semester	Pre-Req.
BA 5301 Financial Accounting*	----
BA 5419 Business Management and Ethics*	----
BA 5418 Managerial Communication*	----
BA 5502 Quantitative Tools for Managers*	----
BA 5302 Microeconomics*	----
BA 5106 Marketing Management*	----

Spring Semester	Pre-Req.
BA 5402 Macroeconomics*	BA 5302
BA 5205 Human Resources Management*	BA 5419
BA 5411 Cost and Management Accounting*	BA 5301
BA 5401 Introduction to Business Finance*	BA 5301
BA 5405 Statistical Inference*	BA 5502
BA 5501 Applied Research Methods	BA 5502

Second Year

Fall Semester	Pre-Req.
BA 5601 Strategic HRM	BA 5205
BA 5105 Financial Management*	BA 5401
BA 5203 Strategic Marketing	BA 5106 BA 5205
BA 5xxx Program Elective-I	----
BA 5xxx Program Elective-II	----
BA 5508 Research Project-I (3 Credits) OR	BA 5501
BA 5507 Thesis-I (3 Credits)	

Spring Semester	Pre-Req.
BA 5104 Strategic Management	BA 5506 BA 5205
BA 5208 Strategic Finance	BA 5105
BA 5308 International Business	----
BA 5xxx Program Elective-III	----
BA 5xxx Program Elective-IV	----
BA 5608 Research Project - II (3 Credits)	BA 5501
BA 5607 OR Thesis-II (3 Credits)	

The students with 4-year BBA/BS (Accounting & Finance) or equivalent degree are exempted 36 credit hours of course work (*Exempted courses for BBA and Equivalent degree holders). The minimum duration of degree for such students will be 1.5-year with the following program structure.

First Year

Fall Semester	Pre-Req.
BA 5501 Applied Research Methods	----
BA 5203 Strategic Marketing	----
BA 5601 Strategic HRM	----
BA 5208 Strategic Finance	----

Spring Semester	Pre-Req.
BA 5104 Strategic Management	----
BA 5xxx Program Elective-I	----
BA 5xxx Program Elective-II	----
BA 5508 Research Project-I (3 Credits) Or	BA 5501
BA 5507 Thesis-I (3 Credits)	

Second Year

Fall Semester	Pre-Req.
BA 5308 International Business	----
BA 5xxx Program Elective-III	----
BA 5xxx Program Elective-IV	----
BA 5608 Research Project-II (3 Credits) Or	BA 5501
BA 5607 Thesis-II (3 Credits)	BA 5507

A student may take either Research Project or Thesis.

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

Student may take any of Level-5 electives from the Faculty of Management Sciences except Project Management electives, subject to the prior approval of the Program Manager.

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PROGRAM ELECTIVES

Finance

- BA 5132 Analysis of Financial Statements
- BA 5133 Corporate Finance
- BA 5134 Derivatives
- BA 5135 Financial Markets and Institutions
- BA 5138 Econometrics
- BA 5139 Financial Risk Analysis
- BA 5151 International Finance
- BA 5155 Mergers and Acquisitions
- BA 5179 Commodity Pricing
- BA 5187 Business Analysis and Forecasting
- BA 5229 Financial Modeling
- BA 5232 Portfolio and Investment Management
- BA 5262 Behavioral Finance
- BA 5294 Venture Capital and Private Equity
- BA 5298 Financial Reporting and Analysis
- BA 5349 FinTech
- BA 5454 Real Estate Investments and Finance
- BA 5459 Islamic Capital and Money Markets

Human Resource Management

- BA 5114 Leadership and Motivation Techniques
- BA 5118 Compensation Management
- 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
- BA 5239 HR Policy Development
- BA 5251 Human Resource Development
- BA 5285 Performance Management
- BA 5292 HR Analytics
- BA 5297 Human Capital Development and Analytics
- BA 5332 Contemporary Issues in Human Resource Management
- BA 5335 Human Resource Audit
- BA 5456 Leadership in Practice

Management

- BA 5111 Business Process Re-engineering
- BA 5112 Change Management
- BA 5116 Industrial Relations and Labor Laws
- BA 5136 Business Strategy and Policy

- BA 5172 Entrepreneurial Business Strategy
- BA 5213 Project Management
- BA 5242 Lean Six Sigma Manufacturing
- BA 5295 Crisis Management
- BA 5333 Business Theory
- BA 5334 Corporate Sustainability
- BA 5433 Business Application
- BA 5434 Hospitality and Tourism Management

Marketing

- BA 5121 Advertising
- BA 5122 Brand Management
- BA 5123 Consumer Behavior
- BA 5124 Customer Relationship Management
- BA 5129 Services Marketing
- BA 5182 Trade Marketing
- BA 5186 Social Marketing
- BA 5198 Experiential and Content Marketing
- BA 5217 Industrial Marketing
- BA 5224 Media Planning and Management
- BA 5226 Pharmaceutical Marketing
- BA 5227 Sales Management
- BA 5228 Retail Management
- BA 5246 Public Relations
- BA 5256 Integrated Marketing Communications
- BA 5259 Emerging Media
- BA 5264 Interactive Global and Regional Marketing
- BA 5269 Marketing Intelligence
- BA 5281 Digital Marketing
- BA 5293 New Product Development Process and Innovation
- BA 5331 Marketing Analytics
- BA 5336 Retail Buying and Merchandising
- BA 5337 Retail Strategy and Structure
- BA 5339 Packaging for Brands
- BA 5355 Marketing Strategies for Emerging Economies
- BA 5436 Retail Operation
- BA 5437 Retail Supply Chain Management
- BA 5438 Marketing Practices in Pakistan
- BA 5451 Strategic Entrepreneurship

Supply Chain Management (SCM)

- BA 5142 Materials Management
- BA 5143 Digital Supply Chain
- BA 5144 Distribution and Supply Chain Network Design
- BA 5194 Supply Chain Finance
- BA 5237 Demand Planning and Forecasting in Supply Chain
- BA 5263 Dynamics of Logistics and Distribution
- BA 5265 Operational Planning in Supply Chain

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- BA 5266 Strategic Procurement in SCM
- BA 5287 Execution and Control of Operations in SCM
- BA 5356 International Trade Procedures and Practices
- BA 5431 Supply Chain Operations
- BA 5432 Green Supply Chain Management
- BA 5439 Green Logistics
- BA 5449 Strategic Warehouse Management
- BA 5457 Advanced Manufacturing and TPM in SCM

Non-Credit Hours Course

- BA 5110 Software Tools for Business

Internship

All MBA students are required to complete a 6-weeks 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.



INTERNATIONAL PROGRAM

CILT (UK) Level 5 Professional Diploma in Logistics & Transport

SZABIST, as an accredited Training Provider of the Chartered Institute of Logistics and Transport International, is offering International Professional Diploma (Level 5) in Logistics and Transport course designed to support professionals in the transportation, supply of inputs and outputs, and storage sectors. The Chartered Institute of Logistics & Transport (CILT) is the leading international professional body for supply chain, logistics, and transport and encourages its development globally having over 35,000 members in over 100 countries worldwide. Its objective is to encourage the Art and Science of Logistics and Transport.

What Is CILT (UK) Level 5 Professional Diploma in Logistics & Transport Designed For?

The Level 5 Professional Diploma is designed for professionals already working within the Supply Chain, logistics, and transport sectors. It is most suited to those who are aspiring to middle management positions in specialist functional areas such as supply chain management, transport planning, or transport operations. The Diploma is also suitable for graduates in other disciplines who are entering the sector for the first time.

What Will I Learn?

On completion of the course students will be able to

1. Critically analyses and synthesize the contemporary practices pertaining to logistics and transportation.
2. Apply the key concepts and techniques of Supply chain management to the formulation and execution the concepts and theories.
3. Apply as appropriate the professional skills, analytical, problem solving, and policy-making, leadership and ethical practices to manage organizational and technological changes.

The Diploma qualification comprises 5 Units (Courses). However, SZABIST is offering 6 tailored courses out of which the students can opt for any 5 Units.

List Of Units (Courses):

- Strategic Warehousing Management
- Strategic Procurement in SCM
- Supply Chain Operations
- Green Logistics
- Dynamics of Logistics & Distribution
- Supply Chain Finance



What Are The Benefits Of the CILT(UK) Professional Diploma?

CILT qualifications are developed to the highest standards, offering valuable professional recognition all over the world. The courses are relevant to industry and government. CILT qualification provides a strong head start in terms of the most updated logistic and transport techniques and in career development.

A student enrolling in the program can also:

1. Receive online membership benefits (except voting rights).
2. Use designatory letters after their name.
3. Access CILT Knowledge Centre of 5.5 million online resources, latest news, international journals and newspapers, statistical data, company profiles, an industry report.
4. Access Jon Williams Library that has a collection of material specific to
5. Access through electronic database 50,000 individual items that can assist with commercial analysis, sales prospecting, and academic research.
6. Access to a host of compliance information, sample legal forms and company policy documents for reference and use.
7. Access in depth information on supply chain, logistics and transport together with management, marketing, economics and finance.
8. Access to CILT International /local conferences and networking opportunities with experts of Logistic and Transport field.
9. Access to offer of 50% concession by Pakistan Railways in AC Sleeper in nominated trains through CILT PAK.
10. Attain global recognition of qualifications.
11. Access to CILT Young Professional forum.
12. Access to Women in Logistic & Transport forum for women to empower them in the industry.

What Is The Time Commitment?

Students will complete the qualification within one academic year; i.e., two semesters. The guided learning hours are set at 400 hours, which includes classroom, fieldwork, and self-study. This is allocated as 80 hours per unit for a minimum of 5 units. The program is held in the evening.

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Executive Master of Business Administration (EMBA)

The EMBA is a 2-year program spread over four semesters and consists of 66 credit hours of teaching. Twenty courses (60 credit hours), and 6 credit hours of Capstone Project or Thesis spread over two semesters (3+3) are needed to graduate. The maximum time limit to complete the EMBA degree is 4 years.

EMBA students and alumni are exempted from all 13 courses of Chartered Institute of Management Accountants (CIMA) qualification, and are only required to pass three case studies.

First Year

Fall Semester	Pre-Req.
BE 5101 Accounting for Business	----
BE 5102 Business Management	----
BE 5205 Marketing Management	----
BE 5104 Managerial Communication	----
BE 5105 Quantitative Analysis for Decision Making	----

Spring Semester	Pre-Req.
BE 5201 Applied Research Methods	BE 5105
BE 5202 Business Finance	BE 5101
BE 5203 Managerial Accounting and Control	BE 5101
BE 5207 Strategic Marketing	BE 5205
BE 5206 Organizational Behavior	BE 5102

Second Year

Fall Semester	Pre-Req.
BE 5301 Financial Management	----
BE 5302 Human Resource Management	BE 5101
BE 5303 Operations and Supply Chain Management	BE 5206
BE 5204 Managerial Economics	----
BE 5xxx Program Elective-I (Marketing, HR, Finance and Supply Chain)	----
BE 5306 Capstone Project-I OR	----
BE 5308 Thesis-I	----

Spring Semester	Pre-Req.
BE 5405 Strategic Entrepreneurship and Family Businesses	BE 5102
BE 5404 Corporate Governance	BE 5102
BE 5407 Corporate Strategy	----
BE 5406 Capstone Project-II OR	BE 5306/
BE 5408 Thesis-II	BE 5308
BE 5xxx Program Elective-II (Marketing, HR, Finance and Supply Chain)	----
BE 5xxx Program Elective-III (Marketing, HR, Finance and Supply Chain)	----

Students can take electives in other level 5 program of FMS (except in MSPM & MPM) with prior permission from concerned Program Manager.

PROGRAM ELECTIVES

Marketing

BE 5321	Services Marketing
BE 5322	Advertising
BE 5323	Brand Management
BE 5324	Consumer Behavior
BE 5325	Customer Relationship Management
BE 5326	Digital Marketing
BE 5327	Emerging Media
BE 5328	Experiential and Content Marketing
BE 5329	Export Marketing
BE 5331	Global Marketing
BE 5332	Integrated Marketing Communications
BE 5333	Media Planning and Management
BE 5334	Retail Management
BE 5335	SAP Sales and Distribution Module

Finance

BE 5421	Analysis of Financial Statements
BE 5422	Banking Operations
BE 5423	Corporate Finance
BE 5424	Financial Modeling
BE 5425	International Banking and Finance
BE 5426	Islamic Banking and Finance
BE 5427	Portfolio and Investment Management
BE 5428	Project Evaluation
BE 5429	Treasury and Funds Management
BE 5431	SAP Financial Accounting Module
BE 5432	SAP Management Accounting Module

Human Resource Management

BE 5521	Compensation Management
BE 5522	Conflict Resolution
BE 5523	Crisis Management
BE 5524	HR Analytics
BE 5525	Leadership and Motivational Techniques
BE 5526	Performance Appraisal
BE 5527	Recruitment and Selection
BE 5528	Salary and Compensation
BE 5529	Talent Management and Succession Planning
BE 5531	Training and Development
BE 5532	SAP Human Capital Module

FACULTY OF MANAGEMENT SCIENCES

Supply Chain Management

BE 5622	Detailed Scheduling and Planning in SCM
BE 5623	Dynamics of Logistics and Distribution
BE 5624	Execution and Control of Operations in SCM
BE 5626	Operational Planning in Supply Chain
BE 5627	Strategic Procurement in SCM
BE 5629	Supply Chain Finance
BE 5631	Supply Chain Management

BE 5632 SAP Procurement Module

BE 5633 SAP Production-Planning and Manufacturing Module

BE 5634 Advanced Manufacturing and TPM in SCM

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

PROFESSIONAL MBA

The PMBA is a one-year program spread over two semesters and consists of 33 credit hours of teaching. Ten taught courses and a business project must be completed. Each semester is of four months' duration. The candidate registers for five/six courses offered every semester to complete the degree within one year.

The PMBA is equivalent to Post Graduate Diploma as per HEC guidelines. The Maximum time limit to complete the PMBA is 4 years.

First Year

Fall Semester	Pre-Req.	Spring Semester	Pre-Req.
BE 5101 Accounting for Business	----	BE 5201 Applied Research Methods	BE 5105
BE 5102 Business Management	----	BE 5202 Business Finance	BE 5101
BE 5103 Contemporary Marketing	----	BE 5204 Managerial Economics	
BE 5104 Managerial Communication	----	BE 5205 Marketing Management	BE 5103
BE 5105 Quantitative Analysis for Decision Making	----	BE 5206 Organizational Behavior	BE 5102
		BE 5309 Business Project	

MHRM

The Master in Human Resource Management program is designed for those who have functional responsibility to carry out the duties of an organization's human resource department. The student is required to complete 33 credit hours of course work within one full calendar year. The maximum time period to complete the degree is four years.

Fall Semester

HR 5xxx	Talent Acquisition and Onboarding
HR 5xxx	Strategic Human Resource and Organizational Development
HR 5xxx	Total Reward and Performance Management
HR 5xxx	Workplace Safety and Legal Frameworks
HR 5xxx	Elective I

Spring Semester

HR 5xxx	HR Metrics and Analytics
HR 5xxx	Human Capital Development
HR 5xxx	Elective II
HR 5xxx	Elective III
HR 5xxx	Capstone Project

ELECTIVES

HR 5311	Advanced Topics in Organizational Behavior
HR 5312	Communication Strategies at Workplace
HR 5313	Continuous Professional Development
HR 5314	Employee Engagement Strategies
HR 5315	Employee Retention
HR 5316	Ergonomics at workplace
HR 5317	Human Resource Information Management
HR 5318	Innovation and Change Management
HR 5321	ISOs Certification
HR 5323	Learning Organization
HR 5324	Organization Restructuring

HR 5325	Organizational Development
HR 5326	QR Strategies and Legality
HR 5327	Quality Assurance Management
HR 5328	Rewards and Performance Management
HR 5329	Supply Chain Management
HR 5331	Talent Management
HR 5332	Total Quality Management
HR 5333	Work and Organization
HR 5334	Workforce Diversity
HR 5335	Workload Balance
HR 5336	Change Management
HR 5337	Strategic Human Resource Management
HR 5xxx	Emerging Trends in HRM

FACULTY OF MANAGEMENT SCIENCES

HR 5xxx Diversity, Equity, and Inclusion in the Workplace
 HR 5xxx Artificial Intelligence in HRM
 HR 5xxx Performance Management and Analytics
 HR 5xxx Managing Virtual Teams

HR 5xxx Sustainable HR Practices
 HR 5xxx Cross Cultural HRM
 HR 5xxx Leadership Development and Succession
 HR 5xxx Institutional Effectiveness and Global Governance

Master of Project Management (MPM)

Master of Project Management is designed to provide individuals with cutting edge insights of project management to manage complex projects. Through this one year degree program, students can gain actionable knowledge for real-world challenges which goes beyond traditional project management fundamentals. The classes are offered on Weekends (Friday to Sunday). It comprises of 30 credit hours spread over two semesters. Minimum ten courses are required to graduate. The maximum time to complete the degree is 4 years.

Master of Project Management has earned accreditation from PMI Global Accreditation Center. This achievement demonstrates our commitment to ensuring our program remains relevant in the ever-changing field of project management and provides students with the skills they need to excel in the workforce.

Mission Statement

The program is designed to enhance competencies of working professionals and students in areas of strategic intent, leadership skills and professional behavior, tools, techniques, processes, contemporary best practices and emerging trends in managing projects effectively through project life cycle in multi-context environment.

First Semester

	Pre-Req.	Govt/NGO
PM 5113 Principles of Project Management	----	PM 5155 Project Program Portfolio Management
PM 5112 Organizational Project Management	----	PM 5361 Government Planning and Development Management
PM 5111 Leadership and Work Ethics	----	PM 5362 NGO Project Management
PM 5114 Project Scope and Scheduling Management	----	PM 5363 Project Governance, Monitoring, and Evaluation
PM 5104 Cost and Financial Management for Project Management	----	PM 5364 Public Private Partnership Management
		PM 5365 Sustainable Development Projects

Spring Semester

	Pre-Req.	Construction/Manufacturing
PM 5351 Project Risk Management	----	PM 5259 Construction Project Management
PM 5207 Software Tools for Project Management	----	PM 5261 Blockchain Project Management
PM 5xxx Elective-I	----	PM 5262 Construction Quality and Cost Management
PM 5xxx Elective-II	----	PM 5263 Project Procurement and Contractual Management
PM 5208 Capstone Project	----	PM 5264 Project Simulation
		PM 5301 Project Quality Management

PROGRAM ELECTIVES

IT/Telecom

PM 5152 Innovation and Technology Management
 PM 5157 Agile Project Management
 PM 5158 Digital Project Management
 PM 5159 Project Analytics
 PM 5161 Project Resource and Communication Management
 PM 5162 Telecom Project Management

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

FACULTY OF MANAGEMENT SCIENCES

Master of Science in Project Management (MSPM)

The program is designed to develop integrated growth of students in strategic management, leadership, professional behavior, research, and project management skills in managing complex projects in culturally diverse and changing business environment in national and international contexts.

SZABIST offers MS in Project Management (MSPM) program which is equivalent to M.Phil. The program lays the foundation for students who are planning to pursue doctoral studies. This university offers two streams for MSPM. The first stream is Course-Work based and the second is Research-Work.

In either stream, students are required to complete 30 credit hours. The maximum time limit to complete the MSPM degree is four years and the minimum time to complete is 1.5/2 years. All MSPM students are required to clear GRE, GAT General test, or HAT relevant with a minimum 50% score.

Course-Work based Stream

- Five compulsory courses (15 CH)
- Five elective courses (15 CH)

Research-Work based Stream

- Five compulsory courses (15 CH)
- Three elective courses (09 CH)
- Two Independent Research Studies (06 CH)
OR Thesis (06 CH)

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

PROGRAM ELECTIVES

- MP 5102 Project Management Constraints
- MP 5201 Quality Management Tools
- MP 5203 Operations Research
- MP 5205 Theories of Management
- MP 5215 Human Resource Management Communication
- MP 5217 Financial Decision Analysis
- MP 5218 Software Project Management
- MP 5221 Project Cost Management
- MP 5223 Project Scheduling, Planning and Time Management
- MP 5226 Governance, Monitoring and Evaluation of Development Projects
- MP 5314 Project Review, Assurance and Governance
- MP 5317 Supply Chain Management
- MP 5318 Business Analysis
- MP 5325 Project Simulation
- MP 5328 Project Risk Management

First Year

Fall Semester	Pre-Req.
MP 5107 Fundamentals of Project Management	----
MP 5113 Strategic Management and Leadership	----
MP 5103 Research Methodology	----
MP 5xxx Elective-I	----

Spring Semester

MP 5202 Quantitative Tools for Research	MP 5103
MP 5213 Case Studies in Project Management	----
MP 5xxx Elective-II	----
MP 5xxx Elective-III	

Second Year

Fall Semester	Pre-Req.
MP 5xxx Thesis-I* OR Independent Research Study-I*/ Elective-IV**	MP 5103/ MP 5202
MP 5xxx Independent Research Study - II/ Elective-V**	MP 5103/ MP 5202

Spring Semester

MP 5xxx Thesis-II	----
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* Thesis to be registered in two semesters, while Independent Research Study-I and Independent Research Study-II can be opted in one semester by Research-work based stream students.

** Elective-IV and Elective-V to be opted by students following Course-Work based scheme.

This Elective courses list is not exhaustive and 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. Also, to register in thesis students are required to complete course work before registering for Thesis.

The maximum course load for a semester is 4 courses (12 credit hours). Courses are not offered on a regular basis in summer as it is not a regular semester.

FACULTY OF MANAGEMENT SCIENCES

MS (Project Management) Bridge Arrangement

This arrangement allows MPM graduates to enhance their academic qualification. For MPM graduates, a maximum of 6 courses may be transferred to the MSPM program subject to passing the courses with a minimum 2.75-grade point, surrendering the MPM degree and enrolling for a minimum of two semesters. The Project, Project in Primavera,

Software 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 a minimum 50% score or GRE score as applicable for the MS program.

Master of Science in Management Sciences

There are two streams available for Master of Science in Management Sciences. 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 are to be completed. The time limit to earn an MS degree is from 1.5 to 4 years.

The scheme of study for each stream is as follows:

1. Course Work Stream

- Six Compulsory Courses
- Four Program Electives
- No IRS or Thesis

Compulsory Courses

MS 5104	Strategic Marketing Decisions
MS 5132	Applied Strategic Management
MS 5137	Research Methods and Techniques
MS 5204	Quantitative Tools for Research
MS 5238	Strategic Human Resource Development
MS 5318	Strategic Finance

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

- Finance
- Marketing
- Human Resource Management

2. Research Work Stream

- Six Compulsory Courses
- Two Program Electives
- Two IRS OR Thesis

Compulsory Courses

MS 5104	Strategic Marketing Decisions
MS 5132	Applied Strategic Management
MS 5137	Research Methods and Techniques
MS 5204	Quantitative Tools for Research
MS 5238	Strategic Human Resource Development
MS 5318	Strategic Finance

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

- Finance
- Marketing
- Human Resource Management

First Year

Fall Semester	Pre-Req.
MS 5137 Research Methods and Techniques	----
MS 5132 Applied Strategic Management	----
MS 5238 Strategic Human Resource Development	----
MS 5104 Strategic Marketing Decisions	----

Spring Semester

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

First Year

Fall Semester	Pre-Req.
MS 5137 Research Methods and Techniques	----
MS 5132 Applied Strategic Management	----
MS 5238 Strategic Human Resource Development	----
MS 5104 Strategic Marketing Decisions	----

Spring Semester

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

FACULTY OF MANAGEMENT SCIENCES

Second Year

Fall Semester	Pre-Req.
MS 5xxx Program Elective III	----
MS 5xxx Program Elective IV	----

Second Year

Fall Semester	Pre-Req.
MS 5xxx IRS I and IRS II OR	----
MS 5xxx Thesis (Part I)	----

Spring Semester

MS 5xxx Thesis (Part II)	-
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PROGRAM ELECTIVES

Finance

MS 5103	Managerial Economics
MS 5105	Econometrics
MS 5111	Derivatives and Financial Risk
MS 5113	Financial Time Series
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 5317	Seminars in Finance
MS 5412	Islamic Banking and Finance
MS 5414	Applied Econometrics
MS 5421	Capital Asset Pricing Model
MS 5425	Empirical Asset Pricing
MS 5426	Mathematical Modeling in Finance
MS 5452	Applied Time Series Analysis for With Software Forecasting
MS 5459	Financial Modelling with Software
MS 5461	Fintech/Data Science for Finance
MS 5469	Risk Management

Marketing

MS 5301	Seminars in Marketing
MS 5422	Distribution and Channel Management
MS 5424	Strategic Brand Management
MS 5428	Global Marketing Strategies
MS 5429	Marketing Metrics
MS 5431	Strategic Entrepreneurial Marketing
MS 5432	Strategic Social Marketing
MS 5433	Advertising Research
MS 5434	Behavioral Marketing
MS 5453	Customer Relations Management
MS 5456	Digital Marketing and Social Media
MS 5465	Market Strategy and Forecasting
MS 5468	Retailing and Analytics

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 5427	Seminars in HRM

Program 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/ Media/MBA program with the prior approval of respective program managers.



FACULTY OF MANAGEMENT SCIENCES

Master of Science in Business Analytics

SZABIST offers Master of Science in Business Analytics with specialization in Finance, Marketing, Management /HR & Supply Chain Management. The program comprises of 30 credit hours & is based on two streams. Research Work Stream requires the student to complete 8 Courses of 24-credit hours and one Research Thesis or Capstone Project of 6-credit hours. The minimum time duration to earn MS Degree by this stream is 2 years. Course Work Stream requires the student to complete 10 Courses of 3credit hours each. The minimum time limit to complete MS Degree by Course Work stream is 1.5 years. The maximum duration to complete this degree is 4 years.

Course Curriculum: The Scheme of Study is as follows;

1. Course Work Stream

- Six Compulsory Courses (6x3 =18 CHs) from Business Analytics Core Domain
- Four Elective Courses (4x3=12 CHs) from area of specialization)

2. Research Work Stream

- Six Compulsory Courses (6x3 =18 CHs) from Business Analytics Core Domain
- Two Elective Courses (2x3=6 CHs) from area of specialization)
- Thesis / Capstone Project (6 CHs)

First Year

Fall Semester	Cr. Hrs.
BSA 5xxx Business Analytics Tools-I	3
BSA 5102 Mathematics and Statistics	3
BSA 5103 Research Methodology	3
BSA 5104 Strategic Decision Making	3

Spring Semester

BSA 5201 Programming Using Python	3
BSA 5xxx Business Analytics Tools-II	3
BSA 5xxx Elective I	3
BSA 5xxx Elective II	3

Second Year

Fall Semester

BSA 5xxx Elective III	3
BSA 5xxx Elective IV	3

First Year

Fall Semester	Cr. Hrs.
BSA 5xxx Business Analytics Tools-I	3
BSA 5102 Mathematics and Statistics	3
BSA 5103 Research Methodology	3
BSA 5104 Strategic Decision Making	3

Spring Semester

BSA 5201 Programming Using Python	3
BSA 5xxx Business Analytics Tools-II	3
BSA 5xxx Elective I	3
BSA 5xxx Elective II	3

Second Year

Fall Semester

BSA 5xxx Thesis-I OR BSA 5xxx Capstone Project-I	3
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Spring Semester

BSA 5xxx Thesis-II OR BSA 5xxx Capstone Project-II	3
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The students may take up to 2x inter-disciplinary electives from degree programs of 18 years.

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

- Finance
- Marketing
- Management/HR
- Supply Chain Management



FACULTY OF MANAGEMENT SCIENCES

PROGRAM ELECTIVES

Finance

- BSA 5221 Fintech/Data Science for Finance
- BSA 5222 Applied Time Series Analysis for Forecasting
- BSA 5322 Risk Management
- BSA 5321 Financial Modelling

Marketing

- BSA 5231 Digital Marketing and Social Media
- BSA 5332 Retailing and analytics
- BSA 5232 Market Strategy and Forecasting
- BSA 5331 Customer Relations Management

Management/HR

- BSA 5241 Decision Support System
- BSA 5221 Management Models
- BSA 5221 Disaster management (GIS)
- BSA 5221 HR Analytics
- BSA 5221 Performance Management

Supply Chain Management

- BSA 5221 Strategies for Managing Supply Chain
- BSA 5221 Advanced Warehouse, Store & Material Management
- BSA 5221 Green Supply Chain Management
- BSA 5221 Distribution Networks



FACULTY OF MANAGEMENT SCIENCES

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 thesis 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 Compulsory 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 must be fulfilled which include the following:
 - Passing GAT Subject with minimum 60% or equivalent GAT Subject test of SZABIST with minimum 60%.
 - 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.
- Program 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 to PhD-Management Science.

First Year

Fall Semester

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

Spring Semester

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

Second Year

Fall Semester

MS 6xxx	Dissertation
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Spring Semester

MS 6xxx	Dissertation
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Third Year

Fall Semester

MS 6xxx	Dissertation
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Spring Semester

MS 6xxx	Dissertation
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PROGRAM 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 6429	Islamic Banking and Finance
MS 6421	Corporate Finance Planning and Decision
MS 6422	Derivatives and Financial Risk
MS 6423	Managerial Economics
MS 6325	Seminars in Finance
MS 6425	Strategic Finance
MS 6434	Mathematical Modeling in Finance

Marketing

MS 6204	Strategic Marketing Decisions
MS 6215	Seminars in Marketing

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MS 6312	Advance Marketing Strategy
MS 6316	Distribution and Channel Management
MS 6415	Strategic Brand Management
MS 6431	Marketing Metrics
MS 6432	Strategic Entrepreneurial Marketing
MS 6433	Strategic Social Marketing
MS 6428	Global Marketing Strategies
MS 6326	Advertising Research
MS 6435	Behavioral Marketing

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 6427	Applied Strategic Management
MS 6424	Strategic Management
MS 6426	Seminars in HRM

Program 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 subject 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.



FACULTY OF COMPUTING AND ENGINEERING SCIENCES



DEPARTMENT OF COMPUTING

The Department of Computing is aimed to produce globally recognized scientific and technological experts in the field of computing. In the recent decade the computer science has played a catalytic role for many real-world applications. This includes, but not limited to, banking, software house, education, government, commerce, security, healthcare etc. The Department of Computing at SZABIST is committed to produce quality graduated who can satisfy the national and global contemporary scientific and technological needs. The students are encouraged to render cutting edge research & development in the domain of computing to handle socio-economic challenges.

PROGRAMS

The Department of Computing at SZABIST offers degree program both at undergraduate and graduate level. All programs being offered in the Department of Computing are fully in-line with the guidance of Higher Education Commission and in accordance with the national and global industrial needs. The programs being offered at the Department of Computing are accredited by National Computing Education Accreditation Council (NCEAC), Pakistan.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS Computer Science

The program is offered through a well-trained and qualified faculty. It consists of 44 courses (five/six courses per semester) with a total of 130 credit hours. BSCS Program is accredited by NCEAC, HEC, Pakistan. The maximum time to complete the degree is six years.

BS (Computer Science) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
First Year					
First Semester					
1	CSC 1101	Calculus and Analytical Geometry	3, 0	3	
	CSC 1102	English Composition and Comprehension	3, 0	3	
	CSC 1103	Fundamentals of Programming	3, 0	3	
	CSCL 1103	Lab : Fundamentals of Programming	0, 1	1	
	CSC 1107	Applied Physics	2, 0	2	
	CSCL 1107	Lab : Applied Physics	0, 1	1	
	CSC 1108	Introduction to Computer Science	2, 0	2	
	CSCL 1108	Lab : Introduction to Computer Science	0, 1	1	
			16		
Second Semester					
2	CSC 1207	Digital Logic Design	2, 0	2	
	CSCL 1207	Lab: Digital Logic Design	0, 1	1	
	CSC 1208	Object Oriented Programming Techniques	3, 0	3	CSC 1103, CSCL 1103
	CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	1	CSC 1103, CSCL 1103
	CSC 1206	Probability and Statistics	3, 0	3	
	CSC 1209	Islamic Studies / Humanities	2, 0	2	
	CSC 1211	Ideology and Constitution of Pakistan	2, 0	2	
	CSC 2101	Communication and Presentation Skills	3, 0	3	CSC 1102
			17		
Second Year					
Third Semester					
3	CSC 1201	Discrete Mathematical Structures	3, 0	3	
	CSC 1202	Multivariate Calculus	3, 0	3	CSC 1101
	CSC 2102	Data Structures and Algorithms	3, 0	3	CSC 1208, CSCL 1208
	CSCL 2102	Lab: Data Structures and Algorithms	0, 1	1	CSC 1208, CSCL 1208
	CSC 3105	Computer Organization and Assembly Language	2, 0	2	CSC 1207, CSCL 1207
	CSCL 3105	Lab: Computer Organization and Assembly Language	0, 1	1	CSC 1207, CSCL 1207
	CSC 3106	HCI & Computer Graphics	2, 0	2	
	CSCL 3106	Lab: HCI & Computer Graphics	0, 1	1	
	CSC xxxx	University Elective-1	2, 0	2	
			18		
Fourth Semester					
4	CSC 2203	Database Systems	3, 0	3	CSC 2102, CSCL 2102
	CSCL 2203	Lab: Database Systems	0, 1	1	CSC 2102, CSCL 2102
	CSC 2204	Finite Automata Theory and Formal Languages	3, 0	3	
	CSC 2206	Linear Algebra	3, 0	3	
	CSC 3101	Computer Architecture	3, 0	3	CSC 3105, CSCL 3105
	CSC 3202	Design and Analysis of Algorithms	3, 0	3	CSC 2102, CSCL 2102
			16		

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
Third Year					
Fifth Semester					
5	CSC 3107	Operating Systems	2, 0	2	
	CSCL 3107	Lab: Operating Systems	0, 1	1	
	CSC 3108	Advance Database Management Systems	2, 0	2	CSC 2203, CSCL 2203
	CSCL 3108	Lab: Advance Database Management Systems	0,1	1	CSC 2203, CSCL 2203
	CSC 3109	Software Engineering	3, 0	3	
	CSC 3201	Compiler Construction	3, 0	3	CSC 2204
	CSC 3110	Civics and Community Engagement	2, 0	2	
	CSC 3111	Entrepreneurship	2,0	2	
			16		
Sixth Semester					
6	CSC 1205	Technical and Business Writing	3,0	3	CSC 1102
	CSC 3206	Artificial Intelligence	2, 0	2	
	CSCL 3206	Lab: Artificial Intelligence	0, 1	1	
	CSC 3209	Computer Networks	2, 0	2	
	CSCL 3209	Lab: Computer Networks	0, 1	1	
	CSC xxxx	CS Elective-1	3, 0	3	
	CSC xxxx	CS Elective-2	3, 0	3	
				15	
Fourth Year					
Seventh Semester					
7	CSC 4105	Final Year Project-I	0, 3	3	
	CSC 4107	Information Security	2, 0	2	
	CSCL 4107	Lab: Information Security	0, 1	1	
	CSC 4109	Professional Practices	2, 0	2	
	CSC xxxx	CS Elective-3	3, 0	3	
	CSC xxxx	CS Elective-4	3, 0	3	
	CSC xxxx	University Elective-2	3, 0	3	
				17	
Eighth Semester					
8	CSC 4106	Parallel and Distributed Computing	3,0	3	CSC 3107, CSCL3107
	CSC 4205	Final Year Project-II	0, 3	3	CSC 4105
	CSC xxxx	CS Elective-5	3, 0	3	
	CSC xxxx	CS Elective-6	3, 0	3	
	CSC xxxx	CS Elective-7	3, 0	3	
			15		
			130		

All the undergraduate students will be required to complete the non-credit course **CSC 1215 Teachings of the Holy Quran**, to qualify for the degree.

Two deficiency courses of Mathematics will be offered to the students having limited mathematical background, as identified by the relevant PM.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

CS ELECTIVES

CSC 4703	Applied Data Mining
CSC 4706	Digital Image Processing
CSC 4708	Enterprise Resource Planning
CSC 4712	IT Innovations
CSC 4714	Network Security and Encryption
CSC 4716	Switching and Routing
CSC 4717	Web Technologies-I
CSC 4718	Wireless and Mobile Technologies
CSC 4719	Game Development
CSC 4721	Introduction to Cloud Computing
CSC 4722	Introduction to Blockchain Technology
CSC 4723	Blockchain and Smart Contract Development
CSC 4724	User Interface Design
CSC 4725	Introduction to Development and Operations
CSC 4726	Systems and Network Administration
CSC 4727	Hybrid Mobile Application Development
CSC 4802	Android Application Development
CSC 4803	Auditing Information Systems
CSC 4805	Data and Network Security
CSC 4806	Digital Signal Processing
CSC 4807	Embedded Programming
CSC 4808	Ethical Hacking
CSC 4809	iOS Development
CSC 4812	Mechatronics
CSC 4813	Modeling and Simulation
CSC 4814	Software Project Management
CSC 4815	Software Engineering-II
CSC 4816	Technopreneurship
CSC 4817	Web Technologies-II
CSC 4823	Interaction Design
CSC 4824	Embedded Systems
CSC 4825	Computer Graphics
CSC 4826	Introduction to Data Science
CSC 4827	Software Quality Engineering and Testing
CSC xxxx	AI in Game Development
CSC xxxx	No Code Programming
CSC xxxx	Virtual and Augmented Reality

UNIVERSITY ELECTIVE SUPPORTING

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

CSC 4501	Business and Technology Ethics
CSC 4502	Design and Creativity
CSC 4503	Introduction to Accounting
CSC 4504	Organizational Behavior
CSC 4601	Foreign Languages

CSC 4602	History of Scientific Ideas
CSC 4603	Management Principles
CSC 4604	Research Report
CSC 4605	Sociology
CSC 4606	Psychology

DISTRIBUTION OF CREDIT HOURS

Areas	Cr. Hrs.	Courses
Computing Core	46	14
Domain Core	18	6
Domain Elective	21	7
Mathematics and Supporting Courses	12	4
Elective Supporting Courses	03	1
General Education Requirement	30	12
Total	130	44

All courses may not be offered in every semester. Elective courses may vary from time to time. Alternative courses may be substituted as and when required. Internship The internship is scheduled at the end of the third year.

After completing the six-week internship, all students must submit a comprehensive report, giving details of their experience and learning.



FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS SOFTWARE ENGINEERING

The BS Software Engineering program at SZABIST is a full-time four year degree program comprising eight semesters with minimum of 130 credit hours. The degree program is designed around a set of courses pertaining to the principles of software analysis, design, architecture, development, testing, and maintenance techniques that are necessary to produce high-quality software systems. Some additional courses from the disciplines of Computer Science, Mathematics, Management Science, and Humanities are part of the degree program to develop a broader knowledge base of the students.

The BS Software Engineering program is offered through a trained foreign qualified faculty. It consists of 44 courses with a total of 130 credits hours. The maximum duration to complete the degree is six years.

BS (SOFTWARE ENGINEERING) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
First Year					
Fall Semester					
	CSC 1101	Calculus and Analytical Geometry	3, 0	3	
	CSC 1102	English Composition and Comprehension	3, 0	3	
	CSC 1103	Fundamentals of Programming	3, 0	3	
	CSCL 1103	Lab : Fundamentals of Programming	0, 1	1	
	CSC 1108	Introduction to Computer Science	2, 0	2	
	CSC L1108	Lab : Introduction to Computer Science	0, 1	1	
	CSC 1107	Applied Physics	2, 0	2	
	CSCL 1107	Lab: Applied Physics	0, 1	1	
			16		
Spring Semester					
	CSC 1208	Object Oriented Programming Techniques	3, 0	3	CSC 1103, CSCL 1103
	CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	1	CSC 1103, CSCL 1103
	CSC 1206	Probability and Statistics	3, 0	3	
	CSC 1207	Digital Logic Design	2, 0	2	
	CSCL 1207	Lab: Digital Logic Design	0, 1	1	
	CSC 1209	Islamic Studies/ Humanities	2, 0	2	
	CSC 1211	Ideology and Constitution of Pakistan	2, 0	2	
	CSC 2101	Communication and Presentation Skills	3, 0	3	CSC 1102
			17		
Second Year					
Fall Semester					
	CSC 2102	Data Structures and Algorithms	3, 0	3	CSC 1208, CSCL 1208
	CSCL 2102	Lab: Data Structures and Algorithms	0, 1	1	CSC 1208, CSCL 1208
	CSC 1201	Discrete Mathematical Structures	3, 0	3	
	CSC 2206	Linear Algebra	3, 0	3	
	CSC 3105	Computer Organization and Assembly Language	2, 0	2	CSC 1207, CSCL 1207
	CSCL 3105	Lab: Computer Organization and Assembly Language	0, 1	1	CSC 1207, CSCL 1207
	CSC 3109	Software Engineering	3, 0	3	
	SEC xxxx	University Elective-1	2, 0	2	
			18		

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Spring Semester				
CSC 3107	Operating Systems	2, 0	2	
CSCL 3107	Lab: Operating Systems	0, 1	1	
CSC 2203	Database Systems	3, 0	3	CSC 2102, CSCL2102
CSCL 2203	Lab: Database Systems	0, 1	1	CSC 2102, CSCL2102
SEC 2406	Software Design and Architecture	3, 0	3	
CSC 1202	Multivariate Calculus	3, 0	3	CSC 1101
SEC 2407	Software Requirement Engineering	2, 0	2	CSC 3109
SECL 2407	Lab: Software Requirement Engineering	0, 1	1	CSC 3109
		16		

Third Year				
Fall Semester				
SEC 3604	Software Construction and Development	2, 0	2	SEC 2406
SECL 3604	Lab: Software Construction and Development	0, 1	1	SEC 2406
CSC 3209	Computer Networks	2, 0	2	
CSCL 3209	Lab: Computer Networks	0, 1	1	
CSC 1205	Technical and Business Writing	3, 0	3	CSC 1102
CSC 3202	Design and Analysis of Algorithms	3, 0	3	CSC 2102, CSCL2102
CSC 3110	Civics and Community Engagement	2, 0	2	
CSC 3111	Entrepreneurship	2, 0	2	
		16		

Spring Semester				
SEC 3608	Software Quality Engineering and Testing	3, 0	3	SEC 3604, SECL 3604
CSC 4107	Information Security	2, 0	2	
CSC 4107	Lab: Information Security	0, 1	1	
CSC 4109	Professional Practices	2, 0	2	
SEC xxxx	SE Elective-1	3, 0	3	
SEC xxxx	SE Elective-2	3, 0	3	
CSC 3206	Artificial Intelligence	2, 0	2	
CSCL 3206	Lab: Artificial Intelligence	0, 1	1	
		17		

Fourth Year				
Fall Semester				
CSC 4105	Final Year Project-I	0, 3	3	SEC 3608, SEC 2406, CSC 2203
SEC 3603	Software Project Management	3, 0	3	CSC 3109
SEC xxxx	SE Elective-3	3, 0	3	
SEC xxxx	SE Elective-4	3, 0	3	
CSC 4106	Parallel and Distributed Computing	3, 0	3	CSC 3107, CSCL 3107
		15		

Spring Semester				
CSC 4205	Final Year Project-II	0, 3	3	CSC 4105
SEC xxxx	University Elective-2	3, 0	3	
SEC xxxx	SE Elective-5	3, 0	3	
SEC xxxx	SE Elective-6	3, 0	3	
SEC xxxx	SE Elective-7	3, 0	3	
		15		
	TOTAL CR. HR	130		

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

All the undergraduate students will be required to complete the non-credit course **CSC 1215 Teachings of the Holy Quran**, to qualify for the degree.

Two mathematics deficiency courses will be offered to those students who have limited mathematical background if deemed necessary by relevant PM.

SE Electives

SEC 3612 Mobile Application Development
 SEC 3614 Computer Graphics
 SEC 4511 e-Commerce
 SEC 4514 Introduction to Data Science
 SEC 4515 Digital Image Processing
 SEC 4518 Visual Programming
 SEC 4519 Software Engineering Economics
 SEC 4521 Agent Based Software Engineering
 SEC 4522 Big Data Analytics
 SEC 4523 Computational Intelligence
 SEC 4524 Computer Vision
 SEC 4525 Data Encryption and Security
 SEC 4526 Design Patterns
 SEC 4527 Formal Methods
 SEC 4528 Game Development
 SEC 4529 Global Software Development
 SEC 4531 Information Systems Audit
 SEC 4532 Introduction to Cloud Computing
 SEC 4533 Management Information Systems
 SEC 4534 Modeling and Simulation
 SEC 4535 Multimedia Communication
 SEC 4536 Natural Language Processing
 SEC 4538 Real Time Systems
 SEC 4539 Semantic Web
 SEC 4542 Software Metrics
 SEC 4543 Systems Programming
 SEC 4544 Technopreneurship
 SEC 4545 Topics in Software Engineering
 SEC xxxx User Interface Design
 SEC xxxx Virtual and Argument Reality
 SEC xxxx AI in Game Development
 SEC xxxx Introduction to Development Operations

UNIVERSITY ELECTIVES SUPPORTING

SEC 3302 Financial Accounting
 SEC 3303 Human Resource Management
 SEC 3306 Sociology
 SEC 3307 Foreign Languages
 SEC 3308 Management Principles
 SEC 3309 Organizational Behavior
 SEC 3311 Psychology

DISTRIBUTION OF CREDIT HOURS

Areas	Cr. Hrs.	Courses
Computing Core	46	14
Domain Core	18	6
Domain Elective	21	7
Mathematics and Supporting Courses	12	4
Elective Supporting Courses	3	1
General Education Requirement	30	12
Total	130	44

Internship

The internship is scheduled 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.

All courses may not be offered in every semester. Elective courses may vary from time to time. Alternative courses may be substituted as and when required.



FACULTY OF COMPUTING AND ENGINEERING SCIENCES

MS Computer Science

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

The program is of 2-year duration and is offered in the evening. It requires 33 credit hours to complete. 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 Studies (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)

Second Year

Third Semester

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

Fourth Semester

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

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)

Second Year

Third Semester

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

Fourth Semester

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

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

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

First Year

First Semester

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

Second Semester

CSC 5201	Advanced Operating Systems
CSC 5202	Advanced Computer Architecture
NSC 5xxx	Elective-I (from N&S Stream)

Second Year

Third Semester

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

Fourth Semester

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

CS-Stream

CSC 5164	Real-Time Systems
CSC 5162	Digital Image Processing
CSC 5161	Machine Learning
CSC 5163	Data Mining
CSC 5166	Operation Research
CSC 5167	Deep Learning
CSC 5264	Expert Systems
CSC 5267	Reverse Engineering
CSC 5266	Digital Forensics and Malware Analysis
CSC 5263	Advanced Resource Sharing Architecture
CSC 5262	Computer Vision
CSC 5268	Robotics
CSC 5261	Advanced Database Design
CSC 5265	Distributed Computing
CSC 5269	Systems and Network Programming
CSC 5168	Big Data Analytics
CSC 5271	Natural Language Processing

SE-Stream

SEC 5163	Software Requirement Engineering
SEC 5161	Software System Architecture
SEC 5164	Software System Quality
SEC 5162	Advanced Software Engineering
SEC 5261	Software Analysis and Testing
SEC 5263	Web Engineering
SEC 5262	Software Project Management

N&S-Stream

NSC 5161	Advanced Computer Networks
NSC 5163	Network Security
NSC 5164	Applied Cryptography
NSC 5162	Information Security
NSC 5165	Cyber Security
NSC 5261	Wireless Sensor Networks
NSC 5264	Telecom Policies and Regulations
NSC 5263	Mobile Ad-hoc Networks
NSC 5262	Advanced Data Communications
NSC 5265	Advanced Routing and Switching
NSC 5166	Advanced Ethical Hacking
NSC xxxx	Digital Forensics
NSC xxxx	Block Chain & Crypto Assets

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)

Programming Fundamentals
Data Structures
Operating Systems
Finite Automata Theory and Formal Languages

MS (CS) with SE-Specialization

Programming Fundamentals
Data Structures
Operating Systems
Software Engineering

MS (CS) with N&S-Specialization

Programming Fundamentals
Data Structures
Operating Systems
Data Communication and Computer Networks

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

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

MS Cyber Security

The MS (Cyber Security) program is of 2-years duration offered in the evening. It requires 33 credit hours, including 4 core courses (3 credits each), 5 elective courses (3 credits each) and a thesis (2 x 3 Credits). Although the institutional administration emphasize and encourage students to undertake research, they can take two courses in lieu of 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 Studies (6 credit hours) OR a Thesis (6 credit hours). The maximum time limit to complete the MS (Cyber Security) degree is 4 years.

Why Study Cyber security?

The world is adapting innovative IT solutions such as mobile technology, online banking and electronic government services into everyday use. However, with so many e-solutions and such extensive use of the Internet, attention needs to be turned to the security issue. Cyber systems require innovative and secure IT solutions for everyday use. Therefore, the demand for skilled security professionals is arising to protect against cyber-attacks. Offered through the Department of Computer Science, MS (Cyber security) is designed to respond to the fast-growing demand for technical cyber security experts nationally and internationally. It provides the necessary foundations for the design and development of systems that need to be secure. The major focus will be given to the design of secure systems that exhibit confidentiality, integrity, and availability. The program will provide students with core skills in wide aspects of the security of information systems.

Key objectives of the program are as follow:

- PEO-1 Recognize and evaluate security requirements and issues in organizations using IT systems.
- PEO-2 Assess cyber security risk management policies to protect an organization's critical information and assets adequately.
- PEO-3 Measure the performance of security systems within an enterprise-level information system to maintain and update an enterprise-level information security system.
- PEO-4 Implement continuous network monitoring and provide real-time security solutions.

Research Based Stream

First Year

First Semester

CYS 5101	Applied Cryptography
CYS 5103	Network Security
CYS 5102	Information Security

Second Semester

CYS 5201	Digital Forensics
CYS 5xxx	Elective-I
CYS 5xxx	Elective-II

Second Year

Third Semester

CYS 5xxx	Elective-III
CYS 5xxx	Elective-IV
CYS 5109	Thesis (Part-I) / IRS-I

Fourth Semester

CYS 5xxx	Elective-V
CYS 5209	Thesis (Part-II) / IRS-II

Course Work Based Stream

First Year

First Semester

CYS 5101	Applied Cryptography
CYS 5103	Network Security
CYS 5102	Information Security

Second Semester

CYS 5201	Digital Forensics
CYS 5xxx	Elective-I
CYS 5xxx	Elective-II

Second Year

Third Semester

CYS 5xxx	Elective-III
CYS 5xxx	Elective-IV
CYS 5xxx	Elective-V

Fourth Semester

CYS 5xxx	Elective-VI
CYS 5xxx	Elective-VII

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Electives Courses

CYS 5234	Network Penetration Testing and Countermeasures
CYS 5237	Security in Mobile and Wireless Networks
CYS 5332	Ethical Hacking
CYS 5334	Malware Detection and Analysis
CYS 5232	Blockchain and Crypto Assets
CYS 5333	Intrusion Detection and Firewalls
CYS 5235	Reverse Engineering and Malware Analysis

CYS 5335	Security and Privacy for the Smart Grid
CYS 5233	Machine Learning for Cyber Security
CYS 5337	Security Modelling and Analysis of Mobile Agent Systems
CYS 5236	Security in Ad Hoc Sensor Networks
CYS 5336	Security in Cloud Environment
CYS 5231	Advanced Topic in Cyber Security - I
CYS 5331	Advanced Topic in Cyber Security - II
CYS xxxx	Research Methodology

Deficiency Courses

Programming Fundamentals (Core Programming Course)
Data Structures & Algorithms OR Design & Analysis of Algorithms
Computer Networks

DISTRIBUTION OF CREDIT HOURS

Course type	Min No. of Courses Min	No. of Credit Hours
Core Courses	4 x 3	12
Electives	5 x 3	15
Thesis	2 x 3	06
Total		33

Pre-Requisites:

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

PhD (Computing)

The PhD program requires students to complete 48 credit hours. Course work of 18 credits (6 courses) is needed which include 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
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Spring Semester

CSC 6xxx	Dissertation
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Third Year

Fall Semester

CSC 6xxx	Dissertation
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Spring Semester

CSC 6xxx	Dissertation
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Elective courses are listed under different streams in MS Computer Science, MS Data Science and MS Cyber Security program.

Followed by successful 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 who 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 ROBOTICS AND ARTIFICIAL INTELLIGENCE

The Department of Robotics and Artificial Intelligence at SZABIST is committed to provide world-class, hi-tech, scientific, and technological expertise in the field of Artificial Intelligence, Robotics, and Data Science. Globally, the hybridization of these fields has rendered robust, intelligent, autonomous, and real-time systems for modern applications. Moreover, the Department of Robotics and Artificial Intelligence at SZABIST is aimed to produce quality graduates. The students are encouraged to render cutting-edge research & development in the domain of Robotics and Artificial Intelligence to handle socio-economic challenges.

PROGRAMS

The Department of Robotics and Artificial Intelligence at SZABIST offers degree programs both at the undergraduate and graduate levels. All programs being offered in the Department of Robotics and Artificial Intelligence are fully in-line with the guidance of the Higher Education Commission(HEC) and in accordance with the national and global industrial needs. The Department of Robotics and Artificial Intelligence offers the following degree programs:

- BS Artificial Intelligence
- MS Data Science

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS ARTIFICIAL INTELLIGENCE

The Bachelor of Science in Artificial Intelligence BS(AI) program is offered by the Department of Robotics and Artificial Intelligence. This comprehensive four-year program encompasses a total of 44 courses, amounting to 130 credit hours. To fulfill the degree requirements, students are provided with internship opportunities, integrating practical experience with academic learning. The BS(AI) program is structured as a full-time, daytime curriculum, meticulously designed to cover the forefront of technological advancements in fields such as Machine Learning, Deep Learning, Explainable AI, Evolutionary Computing, Computer Vision, Software Engineering, and Natural Language Processing. The program comprises of 49 credit hours of Computing Core courses, 15 credit hours of Domain Core courses, 21 credit hours of Domain Electives, 9 credit hours of Mathematics and Supporting courses, 3 credit hours of Elective Supporting courses, and 33 credit hours of General Education Requirement courses. The maximum duration of the program is six years.

Mission Statements

To provide a quality education in Artificial Intelligence in order to produce scientifically, technologically, and professionally competent graduates who are adept to perform a significant role in the continuing transformation of local and global society.

Program Educational Objectives

Following are the Program Educational Objective (PEO)

PEO 1: To equip students with the necessary skills and knowledge to solve complex problems in real-world settings.

PEO 2: To produce graduates practicing in the area of Artificial Intelligence in a socially and ethically responsible way.

PEO 3: To prepare students for lifelong learning skills in Artificial Intelligence and allied disciplines.

Graduate Attributes

To attain the educational objectives of programs, it is intended to produce the following measurable outcomes at the time of graduation. Graduates of the program will have:

- a. Ability to apply knowledge of mathematics, science, computing fundamentals and any of its specializations to solve complex problems.
- b. Ability to identify, formulate, research literature, and analyze complex problems reaching substantiated conclusions using basic principles of mathematics, natural sciences and computer science.
- c. Ability to design solutions for complex problems and design software systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- d. Ability to investigate methodically complex problems including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
- e. Ability to create, select and apply appropriate techniques, resources, and modern IT tools, including prediction and modeling, to complex activities, with an understanding of the limitations.
- f. Ability to understand the impact of professional solutions in societal and environmental contexts and apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues.
- g. Ability to apply ethical principles and commit to professional ethics and responsibilities and norms of society and professional practice.
- h. Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.
- i. Ability to communicate effectively, orally as well as in writing, on complex activities with the community and with the society at large, such as being able to write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- j. Ability to demonstrate management skills and apply systems development principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
- k. Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS ARTIFICIAL INTELLIGENCE CURRICULUM

Codes	Course Title	Cr.Hrs.	Pre-Req.
First Year			
Semester - I			
CSC 1101	Calculus and Analytical Geometry	3, 0	-
CSC 1102	English Composition and Comprehension	3, 0	-
CSC 1103	Fundamentals of Programming	3, 0	-
CSCL 1103	Lab: Fundamentals of Programming	0, 1	-
CSC 1108	Introduction to Computer Science	2, 0	-
CSCL1108	Lab: Introduction to Computer Science	0, 1	-
CSC 1107	Applied Physics	2, 0	-
CSCL 1107	Lab: Applied Physics	0, 1	-
Sub-total		16	

Semester - II			
CSC 1208	Object Oriented Programming Techniques	3, 0	CSC 1103, CSCL 1103
CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	CSC 1103, CSCL 1103
CSC 1206	Probability and Statistics	3, 0	-
CSC 1207	Digital Logic Design	2, 0	-
CSCL 1207	Lab: Digital Logic Design	0, 1	-
CSC 1209	Islamic Studies / Humanities	2, 0	-
CSC 1211	Ideology and Constitution of Pakistan	2, 0	-
CSC 2101	Communication and Presentation Skills	3, 0	CSC 1102
Sub-total		17	

Second Year			
Semester - III			
CSC 2102	Data Structures and Algorithms	3,0	CSC 1208, CSCL 1208
CSCL 2102	Lab: Data Structures and Algorithms	0,1	CSC 1208, CSCL 1208
CSC 3105	Computer Organization and Assembly Language	2,0	CSC 1207, CSCL 1207
CSCL 3105	Lab: Computer Organization and Assembly Language	0,1	CSC 1207, CSCL 1207
CSC 1201	Discrete Mathematical Structures	3,0	-
CSC 3206	Artificial Intelligence	2,0	CSC 1208, CSCL 1208
CSCL 3206	Lab: Artificial Intelligence	0,1	CSC 1208, CSCL 1208
CSC 1202	Multivariate Calculus	3,0	CSC 1101
Sub-total		16	

Semester - IV			
CSC 3209	Computer Networks	2,0	-
CSCL 3209	Lab: Computer Networks	0,1	-
CSC 2203	Database Systems	3,0	CSC 2102, CSCL 2102
CSCL 2203	Lab: Database Systems	0,1	CSC 2102, CSCL 2102
CSC 3202	Design and Analysis of Algorithms	3,0	CSC 2102, CSCL 2102
AIC 2401	Programming for Artificial Intelligence	2,0	CSC 3206, CSCL 3206
AICL 2401	Lab: Programming for Artificial Intelligence	0,1	CSC 3206, CSCL 3206
CSC 2206	Linear Algebra	3,0	CSC 1101
AIC xxxx	AI Elective - I	3,0	
Sub-total		19	

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS ARTIFICIAL INTELLIGENCE CURRICULUM

Codes	Course Title	Cr.Hrs.	Pre-Req.
Third Year			
Semester - V			
CSC 3107	Operating Systems	2, 0	-
CSCL 3107	Lab: Operating Systems	0, 1	-
AIC 3501	Artificial Neural Networks	2, 0	AIC 2401, AICL 2401
AICL 3501	Lab: Artificial Neural Networks	0, 1	AIC 2401, AICL 2401
AIC 3503	Machine Learning	2, 0	AIC 2401, AICL 2401
AICL 3503	Lab: Machine Learning	0, 1	AIC 2401, AICL 2401
AIC 3502	Knowledge Representation and Reasoning	3, 0	AIC 2401, AICL 2401
AIC xxxx	AI Elective - II	3, 0	-
CSC 3111	Entrepreneurship	2, 0	-
Sub-total		17	

Semester - VI			
CSC 1205	Technical and Business Writing	3,0	CSC 1102
AIC 3605	Computer Vision	2, 0	AIC 3501, AICL 3501
AICL 3605	Lab: Computer Vision	0, 1	AIC 3501, AICL 3501
AIC xxxx	University Elective - I	3, 0	-
CSC 3109	Software Engineering	3, 0	-
AIC xxxx	AI Elective - III	3,0	-
CSC 3110	Civics & Community Engagement	2, 0	-
Sub-total		17	

Fourth Year			
Semester - VII			
CSC 4107	Information Security	2, 0	-
CSCL 4107	Lab: Information Security	0, 1	-
CSC 4109	Professional Practices	2, 0	-
AIC 4xxx	AI Elective - IV	3, 0	-
AIC 4xxx	AI Elective - V	3, 0	-
AIC 4707	Final Year Project - I	0, 3	-
AIC xxxx	AI Elective - VI	3, 0	-
Sub-total		17	

Semester - VIII			
AIC 4807	Final Year Project-II	0, 3	AIC 4707
AIC 4xxx	AI Elective - VII	3, 0	-
CSC 4106	Parallel and Distributed Computing	3, 0	CSC 3107, CSCL 3107
CSC xxxx	University Elective - II	2, 0	-
Sub-total		11	
Total Credit Hours		130	

All the undergraduate Muslim students are required to complete the non-cr-edit course **CSC 1215 Teachings of the Holy Quran**, to qualify for the degree.

The following two mathematics deficiency courses (non-credit courses) will be offered to students with limited mathematical background, as identified by the relevant PM/HOD.

Deficiency Courses

- CSC xxxx Differential and Integral Calculus in Computing
- CSC xxxx Algebraic Foundations and Applications in Computing

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Domain Electives

AIC 3603 Natural Language Processing
 AIC 4701 Advanced Statistics
 AIC 4702 Deep Learning
 AIC 4703 Evolutionary Computing
 AIC 4704 Knowledge Based Systems
 AIC 4705 Swarm Intelligence
 AIC 4706 Theory of Automata and Formal Languages
 AIC 4711 Big Data Analytics
 AIC 4712 Game Artificial Intelligence
 AIC 4713 Mobile Application Development
 AIC 4715 Web Programming with Django
 AIC 4801 Agent Based Modeling
 AIC 4802 Data Mining
 AIC 4803 Fuzzy Systems
 AIC 4804 Reinforcements Learning
 AIC 4805 Speech Processing
 AIC 4811 Digital Image and Video Processing
 AIC 4812 Generative AI

AIC 4813 HCI & Computer Graphics
 AIC 4814 Numerical Computing
 AIC 4815 Virtual and Augmented Reality
 AIC xxxx Fundamentals of Robotics

UNIVERSITY ELECTIVES

AIC 4601 Business and Technology Ethics
 AIC 4501 Design and Creativity
 AIC 4503 Introduction to Accounting
 AIC 4504 Organizational Behavior
 AIC 4602 Foreign Languages
 AIC 4502 History of Scientific Ideas
 AIC 4603 Management Principles
 AIC 4605 Research Report
 AIC 4505 Sociology
 AIC 4604 Psychology
 AIC 4506 Financial Accounting
 AIC 4606 Introduction to Marketing

Distribution of Credit Hours	
Domain	Cr. Hrs.
Computing Core	49
Domain Core	15
Domain Elective	21
Mathematics and Supporting Courses	09
Elective Supporting Courses	03
General Education Requirement	33
Total	130



FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Master of Science in Data Science

The Master of Science in Data Science (MS DSc) program is offered by the Department of Robotics and Artificial Intelligence. This two-year evening program requires the completion of 30 credit hours. The curriculum includes 3 core courses, 2 specialization courses in data science, and 3 elective courses. Additionally, students have the option to complete the MS DSc either through coursework or with research work. For those choosing the coursework route, it is mandatory to complete 2 additional courses, each worth 3 credit hours. On the other hand, students opting for the research path must undertake either 2 Independent Research Studies (IRS), totaling 6 credit hours, or a research thesis, also totaling 6 credit hours. The maximum allowable duration to complete the MS DSc degree is 4 years.

Program Objectives

The MS DSc program is designed to aimed the following program objectives:

- PEO 1:** To equip students to transform data into actionable insights to make complex business decisions.
- PEO 2:** To enable students, understand and analyze a problem and arrive at computable solutions.
- PEO 3:** To expose students to the set of technologies that match those solutions.
- PEO 4:** To gain hands-on experience on data-centric tools for statistical analysis, visualization and big data applications at the same rigorous scale as in a practical data science project.
- PEO 5:** To understand the implications of handling data in terms of data security and business ethics.

First Year

First Semester

- DSC 5101 Statistical and Mathematical Methods for Data Science
- DSC 5105 Tools and Techniques in Data Science
- DSC xxxx Elective-I

Second Semester

- DSC 5201 Machine Learning
- DSC xxxx Specialization-Elective-I
- DSC xxxx Specialization-Elective-II

DISTRIBUTION OF CREDIT HOURS	
Course Types	Cumulative Credits
Core courses (3)	9
Specialization Requirement Courses (2)	6
Electives (3)	9
Thesis (I & -II) or Elective (II & V) or Independent Research Study (I & II)	6
Total	30

Second Year

Third Semester

- DSC xxxx Thesis-I or Elective-II or Independent Research Study-I
- DSC xxxx Elective-III

Fourth Semester

- DSC xxxx Elective-IV
- DSC xxxx Thesis-II or Elective-V or Independent Research Study-II

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Core Courses	Cr.Hrs
DSC 5101 Statistical and Mathematical Methods for Data Science	3
DSC 5105 Tools and Techniques in Data Science	3
DSC 5201 Machine Learning	3

Specialization Courses	Cr.Hrs
DSC 5242 Big Data Analytics	3
DSC 5223 Deep Learning	3
DSC 5241 Natural Language Processing	3
DSC 5243 Distributed Data Processing	3

Deficiency Courses
DSC xxxx Programming Fundamentals (Core Programming Course)
DSC xxxx Data Structures and Algorithms OR Design and Analysis of Algorithms
DSC xxxx Database Systems

Elective Courses

DSC 5121 Cloud Computing
DSC 5122 Data Visualization
DSC 5125 Algorithmic Trading
DSC 5126 Bioinformatics
DSC 5127 Distributed Data Processing and Machine Learning

DSC 5128 Inference and Representation
DSC 5129 Optimization Methods for Data Science and Machine Learning
DSC 5131 Social Network Analysis
DSC 5132 Time-Series Analysis and Prediction
DSC 5221 Advanced Computer Vision
DSC 5222 Research Methodology
DSC 5223 Deep Learning
DSC 5224 Bayesian Data Analysis
DSC 5225 Computational Genomics
DSC 5226 Deep Reinforcement Learning
DSC 5227 Distributed Machine Learning in Apache Spark
DSC 5228 High-Performance Computing
DSC 5229 Probabilistic Graphical Models
DSC 5231 Scientific Computing in Finance
DSC 5241 Natural Language Processing
DSC 5242 Big Data Analytics
DSC 5243 Distributed Data Processing
DSC xxxx Machine Learning

All courses may not be offered in every semester.

Elective courses may vary from time to time.

Alternative courses may be substituted as and when required.



FACULTY OF EDUCATION & SOCIAL SCIENCES



DEPARTMENT OF SOCIAL SCIENCES

Department of Social Sciences at SZABIST University aims to develop both intellectual and practical skill sets for our well-rounded students so that they shall face challenges of the 21st century and translate them into opportunities while keeping in mind social, economic and sustainable requirements of the region and beyond.

FACULTY OF EDUCATION & SOCIAL SCIENCES

Department of Social Sciences

BSSS (Economics, Sociology, International Relations, Psychology, Development Studies)

To obtain a BSSS degree in Economics, Sociology, International Relations, Psychology, Development studies, students are required to complete a total of 142 credit hours within 6 years. The degree consists of a total of 46 courses and a Research Project / Capstone Project.

First Year

Fall Semester	Pre-Req.
SS 1117 Computer and Web Skills	----
SS 1116 English for General Purposes	----
SS 1104 Introduction to Community Development and Philanthropy	----
SS 1201 Introduction to Social Sciences	----
SS 1114 Ideology and Constitution of Pakistan (2,0)	----
SS 1212 Islamic Studies (2,0) OR	----
SS 1213 Humanities (For non-Muslim students)	----

Spring Semester

SS 1217 Introduction to Psychology	----
SS 1215 Introduction to Economics	----
SS 1220 Introduction to Sociology	----
SS 1216 Introduction to International Relations	----
SS 1214 Introduction to Development Studies	----
SS 2413 Philosophy	----

Second Year

Fall Semester

SS 2316 English for Academic Purposes	SS 1116
SS 2318 Mathematics and Statistics	----
SS 2310 Business Ethics	----
SS xxxx Major-I	----
SS xxxx Major-II	----
SS xxxx Major-III	----

Spring Semester

SS 2418 Statistical Inferences	SS 2318
SS 2410 Entrepreneurship	----
SS 2407 Ecology	----
SS xxxx Major-IV	----
SS xxxx Major-V	----
SS xxxx Major-VI	----

Non-Credit Hours Mandatory Course (For Muslim Student only)

SS 1225 Teachings of Holy Quran	
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Third Year

Fall Semester	Pre-Req.
SS 3512 Foreign Language-I	----
SS xxxx Major-VII	----
SS xxxx Major-VIII	----
SS xxxx Major-IX	----
SS xxxx Major-X	----
SS xxxx Major-XI	----

Spring Semester

SS 3504 Research Methods	SS 2318
SS 3612 Foreign Language-II	SS 3512
SS xxxx Major-XII	----
SS xxxx Major-XIII	----
SS xxxx Major-XIV	----
SS xxxx Major-XV	----

Summer Semester

SS 3610 Internship	
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Fourth Year

Fall Semester

SS 4709 Research Project-I OR	SS 3504, SS 2318, SS 2418
SS 4710 Capstone Project-I	----
SS xxxx Major-XVI	----
SS xxxx Major-XVII	----
SS xxxx Major-XVIII	----
SS xxxx Major-XIX	----
SS xxxx Major-XX	----

Spring Semester

SS 4809 Research Project-II OR	SS 4709
SS 4810 Capstone Project-II	SS 4710
SS xxxx Major-XXI	----
SS xxxx Major-XXII	----
SS xxxx Major-XXIII	----
SS xxxx Major-XXIV	----

FACULTY OF EDUCATION & SOCIAL SCIENCES

MAJORS

Psychology

- SS 4111 Abnormal Psychology
- SS 4112 Developmental Psychology
- SS 4134 Cognitive Psychology
- SS 4135 Educational Psychology
- SS 4234 Psychodynamics
- SS 4268 History of Psychology
- SS 4167 Child Psychology
- SS 4156 Clinical Psychology
- SS 4114 Personality Theories
- SS 4255 Counseling and Psychotherapy
- SS 4211 Psychological Testing
- SS 4236 Positive Psychology
- SS 4168 Experimental Psychology
- SS 4267 Forensic Psychology
- SS 4262 Physiological Psychology
- SS 4113 Environmental Psychology
- SS 4297 Community Psychology
- SS 4130 Family and Relationship Counseling
- SS 4120 Addiction Counseling

Sociology

- SS 4271 Peace Movements
- SS 4141 Mass, Media and Society
- 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 4197 The Sociology of Religion
- SS 4198 Sociology of Health
- SS 4295 Criminology
- SS 4238 Social Entrepreneurship
- SS 4220 Media and Violence
- SS 4269 Civil Society
- SS 4299 Sociology of Terrorism
- SS 4609 Sociology of Sex and Gender
- SS 4180 Artificial Intelligence and Society
- SS 4602 Governance and Social Policy Planning
- SS 4601 Digital Sociology
- SS 4600 Clinical Sociology
- SS 4607 Sociology of Crowd and Collective Behavior
- SS 4606 Social Problems of Pakistan
- SS 4605 Research and Techniques in Community Development
- SS 4608 Sociology of Family and Marriage
- SS 4280 Demography and Social Statistics
- SS 4603 Introduction to Violence against Women
- SS 4230 Project Development and Management

International Relations

- SS 4222 Strategic Studies
- SS 4176 Globalization and Global Governance
- 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 4278 Political Geography
- SS 4119 Arms Control and Disarmament
- SS 4133 Diplomacy
- SS 4400 Conflict Resolutions and Confidence Building Measures
- SS 4290 International Politics and Human Rights
- SS 4404 International Law-I
- SS 4405 International Law-II
- SS 4403 Foreign Policy of the USA
- SS 4411 Regional and International Organizations
- SS 4408 Modern Political Ideologies
- SS 4260 Foreign Policy Analysis
- SS 4218 International Political Economy
- SS 4409 Nuclear Studies and Non-Proliferation
- SS 4412 Regional Connectivity and Economic Integration
- SS 4407 International Security
- SS 4143 Comparative Politics
- SS 4413 Theories and Approaches of International Relations
- SS 4402 Evolution of State
- SS 4246 Peace Studies

Development Studies

- SS 1163 Development and Politics
- SS 4128 Agriculture Economics
- SS 4138 Corporate Social Responsibility
- SS 4147 Development and Planning
- SS 4139 Gender and Development
- SS 4181 Capabilities and Human Development
- SS 4184 Poverty and Inequality
- SS 4238 Social Entrepreneurship
- SS 4251 Sustainable Development
- SS 4269 Civil Society
- SS 4276 International Institutions
- SS 4706 Development Economics
- SS 4155 Basic Econometrics
- SS xxxx Theories of Development
- SS xxxx Monitoring and Evaluation
- SS xxxx Rural Planning and Development in Pakistan
- SS xxxx Fundamental of Development Studies
- SS xxxx Theories of Development
- SS xxxx Rights-Based Approaches to Development
- SS xxxx Development Management
- SS xxxx Disaster and Development
- SS xxxx Natural Resource Management
- SS xxxx Human Resource Management
- SS xxxx Food Security and Social Protection

FACULTY OF EDUCATION & SOCIAL SCIENCES

Economics

SS 4147	Development and Planning
SS 4261	Mathematical Economics
SS 4183	Industrial Economics
SS 4284	Trade Economics
SS 4128	Agriculture Economics
SS 4283	Labour Economics
SS 4184	Poverty and Inequality
SS 4228	History of Economic Thoughts
SS 4249	Pakistan Economy
SS 4155	Basic Econometrics
SS 4151	Managerial Economics
SS 4313	Principle of Microeconomics
SS 4314	Principle of Macroeconomics
SS 4312	Political Economy
SS 4304	Fiscal Policy Analysis
SS xxxx	Economic Growth
SS 4190	Intermediate Microeconomics
SS 4306	Intermediate Macroeconomics
SS 4315	Public Sector Economics
SS 4302	Environmental Economics
SS 4300	Energy Economics
SS 4317	Urban Economics
SS 4301	Entrepreneurial Economics

SS 4311	Money and Banking
SS 4250	Financial Economics
SS 4316	Time series Econometrics
SS 4308	Introduction to Development Economics
SS 4307	International Finance
SS 4309	Islamic Economics
SS 4510	Behavioral Economics
SS 4259	Financial Markets & Institutions
SS 4310	Microfinance: Theory and Practices
SS 4305	General Equilibrium Theory

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-weeks internship, all students are required to submit a comprehensive report giving details of their experience and learning.

BS Psychology

The Faculty of Social Sciences at SZABIST University offers a comprehensive Bachelor's degree in Psychology with a unique combination of three program electives: Clinical Psychology, Organizational Psychology, and Educational Psychology. The program is designed to provide students with a strong foundation in the principles and practices of Psychology, equipping them with diverse skills such as critical thinking, effective communication, empathy, interpersonal skills, problem-solving, and ethical awareness. The program emphasizes preparing students to address the complexities of human behavior and mental health, thereby equipping them for various early career opportunities.

BS Psychology is 4 year degree program comprising of 8 semesters. The student is required to complete 47 courses (139 credit hours) including internship (3 Credit Hours) and a research project/capstone project (6 Credit Hours). The maximum duration to complete the degree is 6 years.

BS PSYCHOLOGY CURRICULUM

Codes	Course Title	Cr.Hrs.	Pre-Req.
First Year			
Semester - I			
PSY 1101	Community Services and Philanthropy	3	----
PSY 1102	Computer and Web Skills	3	----
PSY 1103	English for General Purposes	3	----
PSY 1104	Introduction to Psychology	3	----
PSY 1105	Ideology and Constitution of Pakistan	2	----
PSY 1106	Introduction to Social Sciences	3	----
Sub-total		17	

FACULTY OF EDUCATION & SOCIAL SCIENCES

Codes	Course Title	Cr.Hrs.	Pre-Req.
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Semester - II

PSY 1201	Basics of Professional Ethics in Psychology	3	----
PSY 1202	Contemporary issues in Psychology	3	----
PSY 1203	English for Academic Purposes	3	----
PSY 1204	History of Psychology	3	PSY 1103
PSY 1205	Islamic Studies OR	2	----
PSY 1206	Humanities (for Non- Muslim students)		
PSY 1207	Philosophy	3	----
Sub-total		17	

Second Year

Semester - III

PSY 2103	Community Psychology	3	----
PSY 2105	Cross Cultural Psychology	3	----
PSY 2301	Oral Communication and Personality Development	3	----
PSY 3106	Environmental Psychology	3	----
PSY 3111	Positive Psychology	3	----
PSY xxxx	Social Psychology	3	----
Sub-total		18	

Semester - IV

PSY 3108	Gender Issues in Psychology	3	----
PSY 3504	Research Methods	3	----
PSY xxxx	Entrepreneurship	3	----
PSY xxxx	Health psychology	3	----
PSY xxxx	Personality Theories	3	----
PSY xxxx	Statistics for Social Scientists	3	----
Sub-total		18	

Non-Credit Hours Mandatory Course (For Muslim Student only)

PSY 1210 Teachings of Holy Quran

Third Year

Semester - V

PSY 1221	Psychological Testing	3	----
PSY 2106	Educational Psychology	3	----
PSY 2108	Forensic Psychology	3	----
PSY 2113	Psychopathology I	3	----
PSY 3501	Foreign Language-I	3	----
PSY xxxx	Organizational Psychology	3	----
Sub-total		18	

Semester - VI

PSY 2107	Experimental Psychology	3	----
PSY 2111	Physiological Psychology	3	----
PSY 3105	Developmental Psychology	3	----
PSY 3113	Psychopathology II	3	PSY 2113
PSY 3601	Foreign Language-II	3	PSY 3501
PSY 3602	International Law and Human Rights	3	----
Sub-total		18	

FACULTY OF EDUCATION & SOCIAL SCIENCES

Codes	Course Title	Cr.Hrs.	Pre-Req.
Fourth Year			
Semester - VII			
PSY 2104	Counseling and Psychotherapy	3	----
PSY 3102	Clinical Psychology	3	----
PSY 3103	Cognitive Psychology	3	----
PSY 4705	Capstone Project-I OR	3	Research Method
PSY 4706	Research Project-I		Statistics for Social Scientists
PSY xxxx	Program Elective-I	3	----
PSY xxxx	Program Elective-II	3	----
Sub-total		18	
Semester - VIII			
PSY 2114	Sports Psychology	3	----
PSY 4805	Capstone Project OR	3	PSY 4705
PSY 4806	Research Project-II		PSY 4706
PSY xxxx	Internship	3	----
PSY xxxx	Program Elective-III	3	----
PSY xxxx	Program Elective-IV	3	----
Sub-total		15	

MAJORS

Psychology

PSY 2107 Experimental Psychology
 PSY 3105 Developmental Psychology
 PSY 2106 Educational Psychology
 PSY 2111 Physiological Psychology
 PSY 2110 Social Psychology
 PSY 3110 Personality Theories
 PSY 3109 Health Psychology
 PSY 2112 Psychological Testing
 PSY 3102 Clinical Psychology
 PSY 2109 Organizational Psychology
 PSY 2104 Counseling & Psychotherapy
 PSY 2108 Forensic Psychology
 PSY 3107 Family and Relationship Counseling
 PSY 3108 Gender Issues in Psychology
 PSY 3106 Environmental Psychology
 PSY 2103 Community Psychology
 PSY 3103 Cognitive Psychology
 PSY 3112 Psychodynamic Approaches
 PSY 3104 Contemporary issues in Psychology
 PSY 2113 Psychopathology-I
 PSY 2105 Cross cultural Psychology
 PSY 2114 Sports Psychology
 PSY 3113 Psychopathology-II
 PSY 2115 Statistics in Psychology
 PSY 3111 Positive Psychology

PROGRAM ELECTIVES:

Organizational Psychology

PSY 4315 Marketing and Consumer Psychology
 PSY 4316 Occupational Health, Safety, and Well-Being

PSY 4314 Leadership Psychology
 PSY 4311 Entrepreneurship Management
 PSY 4319 Workplace Psychological Assessment
 PSY 4312 Human Resource Management
 PSY 4313 Leadership Development and Work Motivation
 PSY 4318 Training and Development
 PSY 4317 Organizational Behavior

Educational Psychology

PSY 4215 Theories of Educational Psychology
 PSY 4211 Approaches to Learning
 PSY 4212 Assessment in Educational Setting
 PSY 4213 Classroom Management
 PSY 4214 Technology and Digital Learning

Clinical Psychology

PSY 4113 Crisis Intervention and Trauma Response: Theory and Practice
 PSY 4111 Addictive Psychology
 PSY 4116 Fundamentals of Psycho-pharmacology
 PSY 4115 Fundamentals of Neuropsychology
 PSY 4114 Family and relationship Counseling
 PSY 4117 Psychology of Aging
 PSY 4112 Clinical Psychology Approaches to Chronic Illnesses
 PSY 4118 Rehabilitation Psychology

Internship

The internship is scheduled for 8th semester. After completion of the 6-weeks internship, all students are required to submit a comprehensive report giving details of their experience and learning.

FACULTY OF EDUCATION & SOCIAL SCIENCES

MS SS (Psychology, International Relations, Economics and Sociology)

There are two streams available for MS SS. 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 Independent Research Study (6 credit hours) OR One Thesis (6 credit hours). In both the streams, 30 credit hours are to be completed. The time limit to earn an MS degree is 1.5 to 4 years. The scheme of study for each stream is as follows:

1- MS (Course Based Stream)

- 02 core courses (6 Credit Hours)
- 08 Electives (24 Credit Hours)
- No IRS or Thesis

First Year

Fall Semester	Pre-Req.
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	----

2- MS (Research Based Stream)

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

First Year

Fall Semester	Pre-Req.
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 IRS - I & II	OR	SS 5121, SS 5122
SS 5xxx Thesis (Part I)		

Spring Semester

SS 5xxx Thesis (Part II)	Thesis-I
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Note: Course offering may fluctuate as per university policy.

Electives (Electives in any of the following specializations)

- Psychology
- International Relations
- Economics
- Sociology

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



FACULTY OF EDUCATION & SOCIAL SCIENCES

ELECTIVES

MS (International Relations)

- SS 5431 Dynamics of Security
- SS 5439 Globalization in the 21st Century: Challenges and Opportunities
- SS 5436 Role of Great Powers and International Relations
- SS 5437 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 5321 History of Ideas
- SS 5206 Political Economy in the Global Perspective
- SS 5443 Human Rights in International Perspective
- SS 5441 Globalization: Issues and Debates
- SS 5434 Political Theory
- SS 5442 History of Economic Thought in Contemporary Perspective
- SS 5438 Foreign Policy of Pakistan
- SS 5445 History of International Relations
- SS 5446 Theories of International Relations
- SS 5334 International Politics of South Asia

MS (Economics)

- SS 5234 International Trade
- SS 5236 Economic Growth and Development
- SS 5238 Monetary Economics
- SS 5203 Public Finance
- SS 5439 Globalization in the 21st Century: Challenges and Opportunities
- SS 5223 Financial Time Series
- SS 5305 Political Economy of Pakistan
- SS 5214 Public Policy Management
- SS 5322 Topics in Political Economy
- SS 5327 Development Economics and Sustainability
- SS 5312 Globalization and Developing Countries
- SS 5321 History of Ideas
- SS 5228 Corporate Governance
- SS 5231 Advanced Microeconomics
- SS 5232 Advanced Macroeconomics
- SS 5233 Advanced Econometrics
- SS 5442 History of Economic Thought in Contemporary Perspective
- SS 5235 Gender Work and Economy
- SS 5432 Gender Issues in Rural Development
- SS 5237 Advanced Labour Economics

MS (Sociology)

- SS 5332 Sociology of Development
- SS 5345 Population Dynamics
- SS 5348 Social Statistics
- SS 5217 Cultural Anthropology
- SS 5212 NGO Management
- SS 5331 Gender and Human Rights
- SS 5402 Law and Human Rights
- SS 5336 Community Development and Social Mobilization

- SS 5339 Gender Issues in Global Scenario
- SS 5333 Sociology of Gender Issues
- SS 5352 Women Studies
- SS 5306 Sacred and Secular
- SS 5351 Sociology of Sexuality
- SS 5441 Globalization: Issues and Debates
- SS 5215 Global Governance
- SS 5349 Sociology of Science, Knowledge and Technology
- SS 5342 Industrial Sociology
- SS 5341 Immigration in Contemporary Perspectives
- SS 5335 Sociology of Migration and Urbanization
- SS 5302 Sustainable Development
- SS 5334 Social Change and Development
- SS 5347 Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality and Growth in 21 Century
- SS 5337 Community Organizing and Development
- SS 5346 Religion and Development
- SS 5344 Population and Development: Current Issues and Future Implications
- SS 5338 Contemporary Sociological Thoughts
- SS 5343 Leadership in Sociology: Theory and Practice
- SS 5353 Foundational Sociological Perspective
- SS 5354 Health and Illness: Theory and Practice

MS (Psychology)

- SS 5461 Applications of Contemporary Data Analysis Tools
- SS 5435 Use, Construction and Interpretation of Tests
- SS 5423 School Psychology
- SS 5422 Cross-Cultural Psychology
- SS 5463 Community Psychology
- SS 5465 Environmental Psychology
- SS 5433 Gender Psychology
- SS 5464 Consumer Behavior
- SS 5421 Perspective in Organizational Psychology
- SS 5469 Psychological Assessment in Organizational Psychology
- SS 5471 Psychology of Leadership
- SS 5468 Organizational Culture and Development
- SS 5466 Marketing and Consumer Psychology
- SS 5467 Organizational Conflict and Management
- SS 5328 Assessment and Diagnosis-I
- SS 5411 Assessment and Diagnosis-II
- SS 5319 Psychotherapy and Counseling-I
- SS 5419 Psychotherapy and Counseling-II
- SS 5329 Psychophysiology and Psychopharmacology
- SS 5462 Clinical Internship

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

FACULTY OF EDUCATION & SOCIAL SCIENCES

MS Development Studies

There are two streams for MS (Development Studies). One Stream is Course Work Based Stream and other one is Research based Stream. To obtain MS degree in Development Studies student is required to complete 36 credit hours including 7 courses (21 credit hours), two hands on workshops (6 Credit Hours), one supervised internship (3 credit hours) and a thesis (6 Credit Hours). Alternatiely, student may opt for 27 credit hours course work, 6 credit Hours hands on workshops, and 3 credit Hours supersied intership. The time limit to earn an MS degree is from 1.5 to 4 years. The scheme of study for each stream is as follows:

1- MS (Course Based Stream)

- 04 Core Courses (12 Credit Hours)
- 03 Specialized courses (09 Credit Hours)
- 02 Workshop based courses (06 Credit Hours)
- 01 Supervised Internship (03 Credit Hours)
- 02 Electives (06 Credit Hours)

First Year

Fall Semester	Pre-Req.
DS 5107 Social Policy for Development	----
DS 5106 Development Project: Planning, Appraisal & Implemenation	----
DS 5111 Tools and Techniques in Development	----
DS 5115 Hands-on-Development Workshop-I	----

Spring Semester

DS 5211 Application of GIS & RS in Dev. (Core)	----
DS 5215 Hands-on-Development Workshop-II	HDW-I
DS 5xxx Specialization Elective-I	----
DS 5xxx Specialization Elective-II	----

Second Year

Fall Semester

DS 5301 Supervised Internship	----
DS 5xxx Specialization Elective-III	----
DS 5xxx Supporting Elective-I	----
DS 5xxx Supporting Elective-II	----

Specializations

Specialization 1: Climate Change Adaptation and Disaster Management

- DS xxxx Climate Change From Theory to Practice
- DS xxxx Emergency Management and Disaster Risk Management
- DS xxxx Resilience and Vulnerability Assessment

Specialization 2: Livelihood & Sustainable Development

- DS xxxx Participation and Community Mobilization
- DS xxxx Cities and Development
- DS xxxx Rural Development and Agrarian Change

2- MS (Research Based Stream)

- 04 Core Courses (12 Credit Hours)
- 03 Specialized courses (09 Credit Hours)
- 02 Workshop based courses (06 Credit Hours)
- 01 Supervised Internship (03 Credit Hours)
- Thesis (06 Credit Hours)

First Year

Fall Semester	Pre-Req.
DS 5107 Social Policy for Development	----
DS 5106 Development Project: Planning, Appraisal & Implemenation	----
DS 5111 Tools and Techniques in Development	----
DS 5115 Hands-on-Development Workshop-I	----

Spring Semester

DS 5211 Research Methodologies (Core)	----
DS 5215 Hands-on-Development Workshop-II	HDW-I
DS 5xxx Specialization Elective-I	----
DS 5xxx Specialization Elective-II	----

Second Year

Fall Semester

DS 5301 Supervised Internship	HWD-II
DS xxxx Specialization Elective-III	----
DS xxxx Thesis-I	DS 5101

Spring Semester

DS 5xxx Thesis-II	Thesis-I
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Supporting Elective Courses

- DS 5103 The Economics of Developing Countries
- DS 5211 Public Policy Management
- DS 5312 Globalization & Developing Countries
- DS 5313 The Political Economy of Pakistan
- DS 5315 Gender and Development
- DS 5317 Conflict Management & Negotiation Skills
- DS 5412 Green and Inclusive Growth
- DS 5415 Population and Development
- DS 5413 Migration and Development
- DS 5416 Tourism and Development
- DS 5414 Natural Resuource Management and Social Challenges
- DS 5411 Global Development Challanges

FACULTY OF EDUCATION & SOCIAL SCIENCES

Deficiency Courses

The Students, who do not have a relevant degree in Development Studies or its related disciplines, have to register for deficiency courses. The relevancy of the degree and number of deficiency courses to be completed by the student will be determined in case to case basis by the Program Manager.

The list of deficiency courses is as follows:

DS 5104 Theories of Development

DS 5316 Right-Based Approaches to Development
DS 5315 Development Management
DS xxxx Fundamentals of Development Studies
DS xxxx Capabilities and Human Development

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

MS Clinical Psychology

There are two streams for MS Clinical Psychology. One stream is Course Work Based and the other one is Research Based. To obtain a MS degree in Clinical Psychology student is required to complete 38 credit hours including 9 Courses (26 Credit Hours), two clinical internships (6 Credit Hours) and a Thesis (6 Credit Hours). Alternatively, students may opt for 32 credit hours course work and 6 credit hours clinical internship. The maximum time limit to earn the degree is 4 years. The scheme of study for each program is as follows:

1- MS (Course Based Stream)

- 03 Core Courses (9 Credit Hours)
- 07 Electives (21 Credit Hours)
- 01 Professional Ethics (02 Credit Hours)
- 02 Clinical Internships (06 Credit Hours)
- No IRS or Thesis

First Year

Fall Semester	Pre-Req.
CLP 5101 Professional Ethics (2,0)	----
CLP 5102 Qualitative Research Methods	----
CLP 5103 Quantitative Research Methods	----
CLP xxxx Elective I	----
CLP xxxx Elective II	----

Spring Semester

CLP 5201 Use, construction, and Interpretation of tests	----
CLP 5205 Clinical Internship-I	CLP 5101
CLP xxxx Elective III	----
CLP xxxx Elective IV	----
CLP xxxx Elective V	----

Second Year

Fall Semester

CLP 5305 Clinical Internship-II	CLP 5205
CLP xxxx Elective-VI	----
CLP xxxx Elective-VII	----

2- MS (Research Based Stream)

- 03 Core Courses (9 Credit Hours)
- 05 Electives (15 Credit Hours)
- 01 Professional Ethics (02 Credit Hours)
- 02 Clinical Internships (06 Credit Hours)
- 01 Thesis (06 Credit Hours)

First Year

Fall Semester	Pre-Req.
CLP 5101 Professional Ethics	----
CLP 5102 Qualitative Research Methods	----
CLP 5103 Quantitative Research Methods	----
CLP xxxx Elective I	----
CLP xxxx Elective II	----

Spring Semester

CLP 5201 Use, construction, and Interpretation of tests	----
CLP 5205 Clinical Internship-I	CLP 5101
CLP xxxx Elective III	----
CLP xxxx Elective IV	----
CLP xxxx Elective V	----

Second Year

Fall Semester

CLP 5209 Thesis I	CLP 5102, CLP 5103
CLP 5305 Clinical Internship-II	CLP 5205

Spring Semester

CLP 5309 Thesis (Part II)	CLP 5209
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FACULTY OF EDUCATION & SOCIAL SCIENCES

Electives

CLP 5151 Assessment and Diagnosis-I
CLP 5152 Neuropsychology
CLP 5153 Psychotherapy and Counseling-I
CLP 5154 Child Psychology
CLP 5251 Assessment and Diagnosis-II
CLP 5252 Psychotherapy and Counseling-II
CLP 5253 Advance Forensic Psychology
CLP 5254 Psychopharmacology
CLP xxxx Community Psychology
CLP xxxx Cross-cultural Psychology
CLP xxxx Developmental Psychology
CLP xxxx Environmental Psychology
CLP xxxx Evidence Based Practice
CLP xxxx Gender Psychology
CLP xxxx Physiological Psychology
CLP xxxx School Psychology

All courses may not be offered in every semester. Elective courses may vary from time to time. Alternative courses may be substituted as and when required.

Thesis Option

Thesis can be taken once all core courses & elective courses are completed. Registration in thesis is allowed in two semesters with 3 credit hours per semester.

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



FACULTY OF EDUCATION & SOCIAL SCIENCES

MS Sociology

Students are required to complete 8 courses, and a thesis (6 credit hour) with a minimum of 30 credit hours. The maximum time limit to earn an MS degree is 4 years.

The scheme of study is as follows:

- 5 Compulsory Courses
- 3 Electives
- Thesis (6 Credit Hour)

First Year

Fall Semester	Pre-Req.
SOC 5101 Foundational Sociological Perspectives	----
SOC 5102 Qualitative Research Methodology	----
SOC 5103 Statistics for Social Scientists	----

Spring Semester

SOC 5201 Contemporary Sociological Theories	SOC 5101
SOC 5202 Quantitative Research Methodology	SOC 5102 SOC 5103
SOC 5xxx Sub-discipline (Elective I)	----
SOC 5xxx Sub-discipline (Elective II)	----

Second Year

Fall Semester	
SOC 5xxx Sub-discipline (Elective III)	----
SOC 5309 MS Thesis (3 credits)	*

Spring Semester

SOC 5309 Thesis (3 credits)	----
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* Pre-req includes Qualitative and Quantitative Research Methodology and Elective I&II



Electives

Sociology of Gender Stream

SOC 5424 Sociology of Gender Issues
 SOC 5423 Gender, Work, and the Economy
 SOC 5426 Women Studies
 SOC 5422 Gender Issues in Rural Development
 SOC 5425 Sociology of Sexuality
 SOC 5xxx Gender Issues in Global Scenario

Sociology of Globalization Stream

SOC 5321 Globalization: Issues and Debates
 SOC 5222 Global Governance
 SOC 5226 Sociology Of Science, Knowledge, and Technology
 SOC 5224 Industrial Sociology
 SOC 5223 Immigration in Comparative Perspective
 SOC 5225 Sociology of Migration and Urbanization

Sociology of Development Stream

SOC 5326 Sustainable Development
 SOC 5325 Social Change and Development
 SOC 5324 Rethinking Global Development:
 New Frameworks for Understanding
 Poverty, Inequality and Growth in 21st
 Century
 SOC 5322 Community Organization and
 Development
 SOC 5221 Religion and Development
 SOC 5323 Population and Development:
 Current Issues and Future Implications

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

FACULTY OF EDUCATION & SOCIAL SCIENCES

PhD Psychology

To obtain a PhD Psychology degree, student is required to complete 48 credit hours including 5 Courses (15 Credit Hours) and one independent research study (3 Credit Hours), and a Dissertation (30 Credit Hours). The time limit to earn is 3 to 8 years.

First Year

Fall Semester

PSY 8101	Advanced Qualitative Research Methods
PSY 8102	Advanced Quantitative Research Methods
PSY 8xxx	Elective-I

Spring Semester

PSY 8xxx	Independent Research Study (IRS)
PSY 8xxx	Elective-II
PSY 8xxx	Elective-III

Second Year

Fall Semester

PSY 8xxx	Dissertation (Proposal Writing)
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Spring Semester

PSY 8xxx	Dissertation
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Third Year

Fall Semester

PSY 8xxx	Dissertation
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Spring Semester

PSY 8xxx	Dissertation
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PhD Degree Milestones

- Clearing admission requirements of HEC and SZABIST
- Completing course work with required CGPA
- Passing Comprehensive Examination
- Passing proposal defense
- Completing dissertation
- Completing publication requirements
- Passing Pre-Defense Seminar
- Receiving Satisfactory reports from foreign evaluators
- Clearing Open Defense

LIST OF ELECTIVES

- PSY 8237 Perspective in Organizational Psychology
- PSY 8137 Psychological Assessment in Organizational Psychology
- PSY 8138 Psychology of Leadership
- PSY 8236 Organizational Conflict and Management
- PSY 8136 Organizational Culture and Development
- PSY 8139 Psychotherapy and Counseling-I
- PSY 8239 Psychotherapy and Counseling-II
- PSY 8140 Use, Construction and Interpretation of Tests
- PSY 8132 Assessment and Diagnosis-I
- PSY 8232 Assessment and Diagnosis-II
- PSY 8238 Psychophysiology and Psychopharmacology
- PSY 8235 Marketing and Consumer Psychology
- PSY 8134 Cross-Cultural Psychology
- PSY 8240 School Psychology
- PSY 8131 Applications of Contemporary Data Analysis Tools
- PSY 8133 Community Psychology
- PSY 8233 Consumer Behavior
- PSY 8234 Environmental Psychology
- PSY 8135 Gender Psychology
- PSY 8231 Clinical Internship



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.

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 Media Science

(Film & TV Production, Advertising Strategy & Design, Journalism and Game Design)

Master of Media Science

(Media Production and Design, Digital journalism and Global Communication, Fashion Media and Digital Communication and Advertising Strategy & Design).

FACULTY OF MEDIA SCIENCES

Bachelor of 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, Game Design and Journalism.

To earn an undergraduate degree, students must enroll in and successfully complete a total of 136 credit hours which include 44 courses, a 6-credit Final Year Project (to be offered over last two semesters), and an internship. Forty-four courses include: 34 core courses, 7 from the stream of specialization requirements, i.e. Film and Television Production, or Advertising Strategy & Design or Journalism or Game Design and 3 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 1124	Civilization Studies	-
MD 1123	Ideology and Constitution of Pakistan (2,0)	-
MD 1106	Photography	-

Spring Semester

MD 1222	English for Academic Purposes	MD 1122
MD 1104	Culture, Media and Society	MD 1115, MD 1122
MD 3601	Art of Music	-
MD 1211	Basic Design	MD 1107
MD 2321	History and Aesthetics of Film	
MD 1223	Islamic Studies OR	-
MD 1224	Humanities (For non-Muslim students)	-

Second Year

Fall Semester

MD 2427	Design Practices I	MD 1211
MD 1118	Topics in Asian Literature	MD 1222
MD 2323	Production Practices I	MD 1107
MD 1217	Introduction to Sound	MD 3601
MD 2313	Idea Development	MD 1107
MD 3505	Principles of Journalism	MD 1122

Spring Semester

MD 1119	Play Analysis	MD 1122
MD 2318	History of Commercial Art	MD 1107, MD 1211
MD 2425	Audiovisual Editing	MD 2323, MD 1217
MD 2428	Introduction to Advertising Strategy	
MD 3527	Design Practices II	MD 2427
MD 2325	Media Research	MD 1104, MD 1222

Non-Credit Hours Mandatory Course (For Muslim Students only)

MD 1210 Teachings of Holy Quran

Third Year

Fall Semester

MD 2423	Theatre Project	MD 1112
MD 2424	Media Psychology	MD 1104, MD 1222
MD 3523	Production Practices II	MD 2323, MD 2313, MD 1217
MD 2405	Media Laws and Ethics	MD 1115, MD 1222
MD 1213	Creative Writing	MD 1122, MD 1118
MD 3525	Radio Programming and Production	MD 1217, MD 3601

Spring Semester

MD 3518	Animation and Motion Graphics	MD 2425, MD 2427
MD 4701	State and Nation Building in Pakistan	MD 1216, MD 1222
MD 3506	Theories of Visual Culture	MD 1104, MD 1222
MD 4xxx	Stream Elective I	-
MD 4xxx	Stream Elective II	-
MD 4xxx	Stream Elective III	-

Fourth Year

Fall Semester

MD 4716	Final Year Project-I	MD 2325
MD 4714	Producing Short Narratives	MD 3523
MD 4xxx	Stream Elective IV	-
MD 4xxx	Stream Elective V	-
MD 4xxx	Stream Elective VI	-
MD 4xxx	Stream Elective VII	-

Spring Semester

MD 4816	Final Year Project-II	MD 4807
MD 4xxx	Cross Specialization Stream Elective I	-
MD 4xxx	Cross Specialization Stream Elective II	-
MD 4xxx	Cross Specialization Stream Elective III	-

SPECIALIZATION STREAMS

Game Design

MD 4911	Principles of game design
MD 4903	Game design theory - Ludology
MD 4913	Gamification in the real world
MD 4905	Narratology I
MD 4915	Narratology II

FACULTY OF MEDIA SCIENCES

- MD 4902 Concept art for Character Design I
- MD 4912 Concept art for Character Design II
- MD 4904 Concept art for Game Environment Design I
- MD 4901 Advanced Animation for 2D games
- MD 4914 Introduction to Unreal Engine

Film & Television Production Stream

- 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
- MD 4789 Green Screen Keying and Composition for Production VFX
- MD 4889 Narrative and Social Change
- MD 4898 Music Score for Film and Television
- MD 4867 Topics in Film and Television
- MD 4883 Urdu Literature in South Asian Cinema
- MD 4873 Modernity in Cinema in Bengal
- MD 4792 Music Production and Design
- MD 4892 Music Theory and Performance
- MD 4906 Advanced Video Editing and Motion Graphics

Advertising Strategy & Design Stream

- MD 4723 Advance Animation
- MD 4731 Advertising Research
- MD 4739 Advertising Design and Concept
- MD 4754 Creative Aspect in Advertising
- MD 4779 Digital Brand Communication
- MD 4835 Consumer Behavior
- MD 4843 Campaign Strategy
- MD 4846 New Media Advertising
- MD 4847 Copywriting
- MD 4736 Integrated Marketing Communications
- MD 4837 Media Planning
- MD 4782 Interaction Design
- MD 4787 Digital Design and Publishing
- MD 4834 Advertising in Pakistan
- MD 4833 Brand Management
- MD 4897 Digital Media Planning
- MD 4798 Fundamentals of Digital Advertising
- MD 4854 Illustration
- MD 4732 Typography
- MD 4878 Design for Social Change
- MD 4907 AI and Creative Ownership

Journalism Stream

- MD 4577 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
- MD 4793 Citizen Journalism
- MD 4893 Environmental Journalism
- MD 4794 Fashion Journalism
- MD 4895 Peace Journalism
- MD 4795 Reporting of Politics and Governance
- MD 4894 Foreign Correspondence
- MD 4896 Sports Reporting
- MD 4796 Digital Public Relations and Blogging
- MD 4797 Introduction to Digital News Reporting
- MD 4774 Media Anthropology
- MD 4776 Media Convergence and Innovation
- MD 4916 Science Communication and Journalism

Cross Specialization Stream Electives

Students have to do three cross specialization-stream electives. The student may take 3 courses from any other specialization stream apart from the one that they are majoring in.

Stream specialization and cross stream specialization will be offered depending on the availability of resources.

Certain film and video production courses may require additional fees for equipment rental, film purchases, and travel. The Faculty 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 enroll full time should consult the Program Manager to discuss any accommodation they might need.

All first semester students are required to enroll in 6 courses. In order to register for thesis credits in the 7th and 8th semester for Thesis I and II respectively, students must complete all pre-requisites. 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 have learned in their internship.

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

FACULTY OF MEDIA SCIENCES

Master of Media Science (MMS)

Faculty of Media Sciences offers Masters degree in Media Science. Students enrolling in this program will be offered to select any one of the following 4 streams of specialization;

Media Production and Design Stream	Fashion Media and Digital Communication Stream	Digital Journalism and Global Communication Stream	Advertising Strategy & Design Stream
This stream is primarily for media professionals and middle management of production houses and teams engaged in media houses, and are hampered in their careers because of lack of knowledge and understanding of production technique skills.	This stream is for professionals who want to join the growing Fashion media and merchandising industry in Pakistan, in addition to courses that help in managing public relations and communication strategy of companies and nonprofits.	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.	This stream will provide students with a comprehensive training through courses that prepare them to engage in various career options in the advertising industry.

The choice of four electives will determine the stream. In addition to the four specializations offered, students are at liberty in choosing their path of academic research related to praxis; through course work, or Thesis (For those students who are interested in following an academic career leading to a doctorate).

The students decide on their respective chosen stream in the 2nd semester; the choice of electives varies according to the four options offered to students. Specialization Streams Offered: Media Production and Design, Fashion Media and Digital Communication, Digital Journalism and Global Communication and Advertising Strategy & Design.

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

Masters by Course Work

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

Masters by Thesis

30 Credit hours (08 courses & Thesis), which includes 4 core courses (12 credit hours), 4 electives (12 credits hours), Thesis I & Thesis II (6 credit hours).

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

All students must complete their degree within four years.

FACULTY OF MEDIA SCIENCES

First Year

Fall Semester

MMS 5101	Applied Media Research	
MMS 5102	Digital Culture and Society	
MMS 5103	Media Evolution and Innovation	
MMS 5104	Media Theories and Application	

Spring Semester

MMS 5xxx	Elective I	
MMS 5xxx	Elective II	
MMS 5xxx	Elective III	
MMS 5209	Thesis I/MMS 5xxx Elective	

Second Year

Fall Semester

MMS 5xxx	Elective IV	
MMS 5309	Thesis II/MMS 5xxx Elective	

ELECTIVES

Media Production and Design Stream:

MMS 5431	Urban Geographies and Visual Cultures
MMS 5433	Camera and Lights
MMS 5436	Film Analysis
MMS 5439	Story Telling and Screenplay Writing
MMS 5435	Documentary Making
MMS 5434	Directing
MMS 5441	Theories of Film and Television
MMS 5432	Aesthetics of Films
MMS 5438	Production Management
MMS 5442	Theories of Visual Culture and Film
MMS 5437	New Media Production

Fashion Media and Digital Communication Stream:

MMS 5339	Interaction Design for Fashion Industry
MMS 5336	Fashion Design Trends
MMS 5334	E-commerce for Fashion
MMS 5332	Digital Media and Fashion Industry
MMS 5341	Social Media and Online Communication
MMS 5331	Digital Fashion Illustration
MMS 5337	Fashion Photography
MMS 5335	Fashion Advertising
MMS 5338	Fashion Public Relations
MMS 5333	Digital Visual Communication

Digital Journalism and Global Communication Stream:

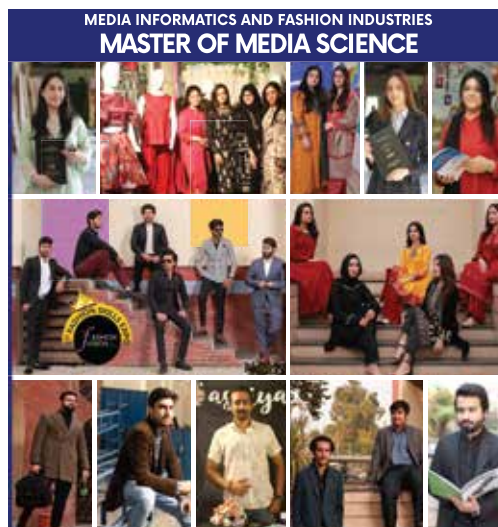
MMS 5237	Global Journalism
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MMS 5231	Beat Reporting
MMS 5238	Investigative Journalism
MMS 5243	Multi-Format News Reporting
MMS 5232	Data Journalism
MMS 5235	Fashion and Entertainment Journalism
MMS 5241	Media and Post-Colonialism
MMS 5242	Media, Politics and Governance
MMS 5239	Issues in International Media
MMS 5234	Digital Journalism
MMS 5236	Global Communication
MMS 5233	Development Communication

Advertising Strategy & Design Stream:

MMS xxxx	Copywriting and Advertising Conceptualization
MMS xxxx	Digital Advertising
MMS xxxx	Creative Advertising Campaigns
MMS xxxx	Strategic Creative Development
MMS xxxx	Advertising Account Management
MMS xxxx	Advanced Integrated Marketing Communication
MMS xxxx	Strategic Brand Management
MMS xxxx	Consumer Engagement
MMS xxxx	Campaign Strategy
MMS xxxx	New Media Advertising
MMS xxxx	Media Planning & Strategy

Electives will be offered depending on the availability of resources.



ACADEMIC CALENDAR 2024-25 (Islamabad Campus)

ACADEMIC CALENDAR 2024-25 (Islamabad Campus)

FALL 2024

WEEK	COMMENTS
1	Course Registration
2	IRS Thesis Advisors Meeting
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	Mid-Term Exam for Undergraduate Students
8	Mid-Term Exams for Graduate Students
9	
10	
11	Last Week to Withdraw Courses
12	
13	
14	
15	
16	Final Exam Week
17	Final Exam Week
18	
	Faculty Meeting/Orientation
	Comprehensive Exam
	Independent Research Study Presentations of MS/PhD students

Classes Commencement Date

Islamabad Campus:

16 September, 2024

ACADEMIC CALENDAR 2024-25 (Islamabad Campus)

ACADEMIC CALENDAR 2024-25 (Islamabad Campus)

SPRING 2025

WEEK	COMMENTS
1	Course Registration
2	
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	Mid-Term Exam for Undergraduate Students
8	Mid-Term Exams for Graduate Students
9	
10	
11	Last Week to Withdraw Courses
12	
13	
14	
15	
16	Final Exam Week
17	Final Exam Week
18	
	Faculty Meeting / Orientation
	Independent Research Study Presentations of MS/PhD students
	Comprehensive Exam

Classes Commencement Date

Islamabad Campus:

10 February, 2025

CAMPUS WISE PROGRAMS OFFERING (FALL 2024)

PROGRAMS	CAMPUSES					
	Islamabad	Karachi	Larkana	Hyderabad	Dubai	Gharo
Bachelor of Business Administration (BBA)	✓	✓	✓	✓	✓	✓
BA (Hons.) in Business Studies (BABS)		✓				
BS Accounting & Finance	✓	✓	✓	✓		
BS (Accounting & Finance) 2.5 Years (ICAP/CAF Qualified only)	✓	✓				
BS Business Analytics	✓					
BS Entrepreneurship		✓				
BS Computer Science	✓	✓	✓	✓	✓	✓
BS Artificial Intelligence	✓	✓				
BS Software Engineering	✓	✓		✓		
Bachelor of Media Science	✓	✓				
BS Social Sciences	✓	✓	✓	✓		
BS Psychology	✓	✓				
BS English		✓				
BE Mechatronic Engineering		✓				
BS Biosciences		✓				
BS Biotechnology		✓				
BS Educational Psychology		✓				
BS Public Health		✓	✓			
Bachelor of Law (LLB)		✓				
Certificate of Higher Education in Common Law (CertHE)		✓				
CILT (UK) Level 5 Professional Diploma in Logistics & Transport	✓	✓				
Master in Business Administration (MBA)	✓	✓	✓	✓	✓	
Executive MBA	✓	✓			✓	
Masters in Project Management	✓	✓	✓		✓	✓
Professional MBA	✓					
Masters in Human Resource Management	✓					
Master of Advertising		✓				
MS Public Health (MSPH)		✓	✓			
MS Biosciences		✓				
MS Biotechnology		✓				
MS Computer Science	✓	✓		✓	✓	
MS (CS) with specialization in Core Computing	✓	✓				
MS (CS) with specialization in Software Engineering	✓	✓			✓	
MS (CS) with specialization in Networks & Security	✓	✓			✓	
MS Cyber Security	✓	✓				
Master of Media Science	✓	✓				
MS Management Sciences	✓	✓	✓	✓		
MS (Business Analytics)	✓					
MS Development Studies	✓					
MS Mechatronic Engineering		✓				
MS Data Sciences	✓	✓				
MS Educational Leadership and Management		✓	✓			
MS Project Management	✓	✓				
MS Social Sciences	✓	✓				
MS (SS) with specialization in Economics	✓	✓				
MS (SS) with specialization in Psychology	✓	✓				
MS (SS) with specialization in Sociology	✓	✓				
MS (SS) with specialization in International Relations	✓	✓				
MS Clinical Psychology	✓					
MS Sociology	✓					
PhD Social Sciences		✓				
PhD (SS) with specialization in Economics		✓				
PhD (SS) with specialization in Psychology		✓				
PhD (SS) with specialization in Sociology		✓				
PhD (SS) with specialization in International Relations		✓				
PhD Computing	✓	✓				
PhD Management Sciences	✓	✓				
PhD Psychology	✓					
PhD Biosciences		✓				
PhD Educational Leadership and Management		✓				

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

Disclaimer

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

WE CELEBRATE DIVERSITY!



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