



BS & MS in Biosciences & Masters of Public Health (MPH)

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

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

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



Recognition

The Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) is a fully Chartered Institute established through a Legislative Act of the Sindh Assembly (Sindh Act No. XI of 1995) and is approved and recognized by the Higher Education Commission (HEC), Pakistan, as a degree awarding institution. SZABIST has campuses in Karachi, Islamabad, Larkana, Hyderabad and Dubai (UAE).

HEC and CIEC Ranking

Higher Education Commission (HEC), Pakistan has ranked SZABIST as one of the top educational institutes and one of the best business schools of Pakistan in their latest Quality Based Ranking. HEC's Quality Assurance Agency (QAA) has ranked SZABIST's QEC in the highest "W" category with score "92.56%" for the period of June 30, 2014.

The Chartered Inspection and Evaluation Committee (CIEC) in their latest evaluation rated SZABIST as an "Outstanding" institution by awarding it "6 Stars". Also, five of our departments i.e. Management Sciences, Computing, Social Sciences, Media Sciences and Biosciences are individually rated "Outstanding".

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:

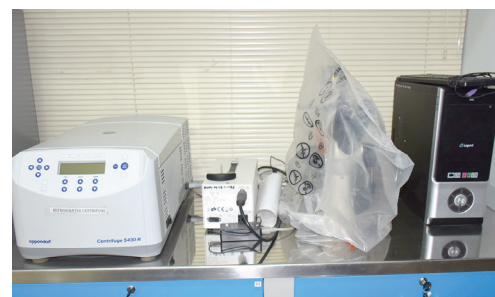
- Meet national and global contemporary needs;
- Conduct cutting edge research and development;
- Provide hi-tech scientific and technological expertise;
- Meet current and future socio-economic challenges;
- Meet global citizenship responsibility.

Career Opportunities

Biosciences graduates have tremendous opportunities of serving in wide range of multidisciplinary sectors such as:

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|---|--|
| ■ Food Industry | ■ Public Health Educator |
| ■ Pharmaceutical Industry | ■ Environmental Health Scientist |
| ■ Biotechnology Industry | ■ Public Health Practitioner |
| ■ Research scientists in the R&D sector | ■ Tropical & Infectious Disease Specialist |
| ■ Hospitals and Healthcare Centers | ■ Private Healthcare Consultant |
| ■ Agriculture Industry | ■ Nutrition Health Advisor |
| ■ Business Consultancy | ■ Health Policy Associate |
| ■ Epidemiologist | ■ International Healthcare Worker |
| ■ Disaster and Emergency Specialist | ■ Health Services Administrator |
| ■ Public Health Nurse | ■ Occupational Health Specialist |
| ■ Healthcare Manager | ■ Clinical Research Coordinator |

A 6-8 week internship program in a reputable organization will further ensure to secure job placements for our graduates.



BS Biosciences

Degree Requirements

In line with the HEC rules, BS-Biosciences at SZABIST is a 4-year program of 8 semesters. Graduation requirements are 135 credit hours, an internship of at least 6 weeks, and a research project.

Admission Criteria

For admission to BS-Biosciences program the candidate must have Intermediate (Science) with minimum 50% marks/O levels (minimum 8 passes) and A levels (minimum 3 passes) across any two principal subjects (Biology, Chemistry and/or physics).

Inter Board Committee of Chairmen (IBCC) equivalency is required for O & A Levels/IB Diploma/High School Diploma or equivalent. General Paper (A Levels) will not be counted.

Fees Structure*

	Pakistani Nationals	Foreign Nationals
Prospectus and Test Fees:	Rs. 1,500/-	US\$ 45
Admission Fees:	Rs. 20,000/-	US\$ 500
Security Deposit: (refundable)	Rs. 5,000/-	US\$ 165
Student Activity Charges:	Rs. 1000/-	US\$ 30
Tuition Fees:	Rs. 14,400/- (Per Course)	US\$ 330
Tuition Fees after Subsidy:	Rs. 7,200/- (Per Course)	US\$ 165

SZABIST reserves the right to revise the fees/withdraw of scholarships without any prior notice.



Please visit our website www.szabist.edu.pk and click the link "Online Admission"

(A valid email address is necessary to fill up the online Admission form).

For further queries e-mail at: admissions@szabist.edu.pk

SUBJECTS	TOTAL CREDIT HRS (Theory/Lab)	SUBJECTS	TOTAL CREDIT HRS (Theory/Lab)	SUBJECTS	TOTAL CREDIT HRS (Theory/Lab)
Semester I		Molecular Biology	2(1)	Semester VIII	
Cell Biology	2(1)	Humanities	3(0)	Environmental Science	2(1)
English for General Purposes	3(0)	Genetics	2(1)	Biophysics	2(1)
Fundamental Mathematics	3(0)	Semester V		Business Management	3(0)
Microbiology-I	2(1)	Genetic Engineering	2(1)	Epidemiology	3(0)
Chemistry	2(1)	Biotechnology-I	2(1)	Elective-III	3(0)
Semester II		Hematology	2(1)	Elective-IV	3(0)
Microbiology-II	2(1)	Bioethics	3(0)		
Biochemistry-I	2(1)	Pharmacology-I	2(1)	Total Credit Hours=138	
English for Academic Purposes	3(0)	Psychology	3(0)	(After the completion of Semester VI an internship is compulsory)	
Sociology	3(0)	Semester VI		LIST OF ELECTIVES	
Statistics	3(0)	Basic Endocrinology	3(0)	Advanced Biochemical Techniques	3(0)
Islamic studies/Ethics & Pakistan Studies	3(0)	Biotechnology-II	2(1)	Medical Transcription	3(0)
Semester III		Agriculture Science	3(0)	Virology	3(0)
Physiology-I	2(1)	Nutrition and Dietetics	3(0)	Nanotechnology	3(0)
English for Professional Purposes	3(0)	Pharmacology-II	2(1)	Advanced Molecular Techniques	3(0)
Biochemistry-II	2(1)	Research Methodology	3(0)	Applied Enzymology	3(0)
Introduction to Computing	2(1)	Semester VII		Systems Biology	3(0)
Immunology	2(1)	Research Report	6(0)	Telemedicine	3(0)
Semester IV		Animal and Plant Tissue Culture	2(1)	Stem Cell Research	3(0)
Physiology-II	2(1)	Bioinformatics	2(1)	Food Biotechnology	3(0)
Lab Management	2(1)	Elective-I	3(0)	Fermentation Biotechnology	3(0)
		Elective-II	3(0)	Medical Biotechnology	3(0)
				Techniques in Biotechnology	2(1)

MS Biosciences

Degree Requirements

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

Admission Criteria

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

Last Degree verification by Higher Education Commission (HEC) is required.

Fees Structure*

	Pakistani Nationals	Foreign Nationals
Prospectus and Test Fees:	Rs. 1,500/-	US\$ 45
Admission Fees:	Rs. 20,000/-	US\$ 500
Security Deposit: (refundable)	Rs. 5,000/-	US\$ 165
Student Activity Charges:	Rs. 1000/-	US\$ 30
Tuition Fees:	Rs. 20,100/- (Per Course)	US\$ 465
Tuition Fees after Subsidy:	Rs. 10,050/- (Per Course)	US\$ 232



SZABIST reserves the right to revise the fees/withdraw of scholarships without any prior notice.

Semester-1

Advanced Research Methodology 3(0)
Biostatistics 2(1)

Semester-1I

Techniques in Biomolecules Analyses 2(1)
Molecular Genetics 2(1)

Semester-1II

Elective-I
Elective-II
Thesis or Elective-V

Semester-1IV

Elective-III
Elective-IV
Thesis (Continued) or Elective-VI

LIST OF ELECTIVES

Applied Biotechnology 3(0)
Environmental and Industrial Biotechnology 3(0)
Plant Biotechnology 3(0)
Fermentation Design and Engineering 3(0)
Medical Biotechnology 3(0)
Biocatalysis and Enzymology 3(0)
Clinical Biochemistry 3(0)
Drug Discovery and Development 3(0)
Biocomputation 3(0)
Cancer Biology 3(0)
Applied Immunology 3(0)
Techniques in Diagnostics 3(0)
Molecular Dynamics 3(0)
Food Sampling Techniques and Analysis 3(0)
Food Quality Management System 3(0)
Food Toxicology and Adulteration 3(0)

Masters of Public Health (MPH)

Degree Requirements

Master of Public Health (MPH) at SZABIST is a two-year program spread over four semesters and consists of 60 credit hours of teaching. The curriculum includes 19 courses, 16 of 3 credit hours, 3 of 2 credit hours, and a research project (Thesis) of 6 credit hours or two Independent Research Studies of 3 credit hours each.

Admission Criteria

For admissions to the MPH program, candidates must possess 16 years of education in any field of biological sciences and/or accredited by PMDC. Applicants with MBBS, BDS, B-Pharm degrees or Master in Social and allied sciences from a university recognized by HEC with minimum 50% marks/CGPA 2.5 are eligible to apply.

Last Degree verification by Higher Education Commission (HEC) is required.

Fees Structure*

	Pakistani Nationals	Foreign Nationals
Prospectus and Test Fees:	Rs. 1,500/-	US\$ 45
Admission Fees:	Rs. 20,000/-	US\$ 500
Security Deposit: (refundable)	Rs. 5,000/-	US\$ 165
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Semester-I

Foundation of Public Health	3(0)
Epidemiology	3(0)
Statistical Reasoning in Public Health	3(0)
Research Methodology	3(0)
Social and Behavioral Sciences	3(0)

Semester-II

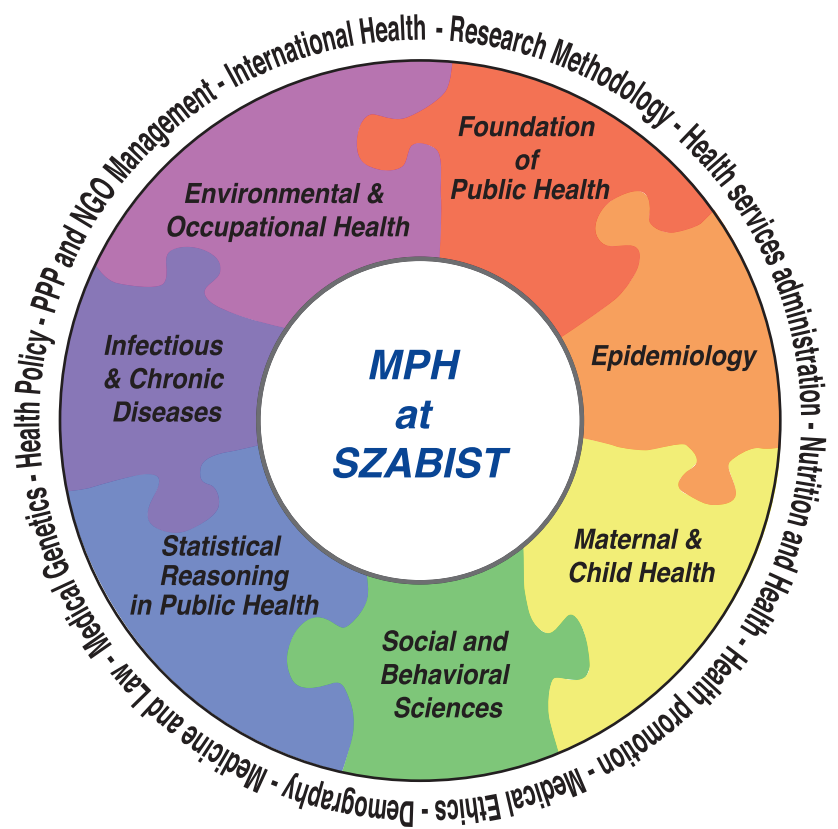
Infectious Diseases	3(0)
Environmental & Occupational Health	3(0)
Health services administration	3(0)
Chronic Non Communicable Diseases	3(0)
Applied Health Communication	3(0)

Semester-III

Maternal & Child Health	3(0)
Demography	3(0)
Nutrition and Health	3(0)
Medical Ethics & Law	3(0)
Thesis-I	3(0)

Semester-IV

Health promotion	3(0)
Health Policy	3(0)
PPP and NGO Management	3(0)
International Health	3(0)
Thesis-II	3(0)





Faculty

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

Lab Facilities

SZABIST is proud of its hi-tech and state-of-the-art scientific laboratories conducting research at par with international standards. Our labs include:

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

Admission Schedule

Last date to apply	:	14th Jan, 2017
Admission test Date	:	17th Jan, 2017
Interviews	:	19th Jan, 2017
Classes commence	:	13th Feb, 2017

Other Programs

SZABIST also offers the following programs; BBA, BE (Mechatronic Engineering), BS (Media Science), BS (Computer Science), BS (Social Sciences), MBA, MBA (Banking & Finance), EMBA, Masters in Project Management (MPM), Master of Advertising, MS (Project Management), MS (Media Studies), MS/PhD (Management Sciences, Social Sciences, Computer Science and Education Leadership & Management) and the University of London International Programme of LLB and the BA (Hons) Business Studies (in affiliation with University of South Wales, UK). Separate brochures of these programs are available at the Admission Office.

APPLY ONLINE:

Log on to : <http://admissions.szabist.edu.pk>
Online applications can also be filled at SZABIST campus

For further information please contact:

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Tel: 021-35823433 (Ext:148-147-104). Fax: 021-358 21537. www.szabist.edu.pk