BS (Computer Science)

SZABIST offers a 4-year (8-semesters) BS (Computer Science) degree with majors in Software Engineering, Information Technology and Telecommunication.

The BS (Computer Science) program consists of 40 courses (5-courses per semester) with a total of 130 credit hours.

Admission Requirements

For admission to the BS (Computer Science) program, the candidate must have completed A-Level (minimum 3 passes)

Intermediate (minimum 50% marks), (including first year, no supplementary) or equivalent from an HEC recognized institution. Candidates with mathematical background will be preferred.

An entrance test and group discussion / interview will be given to all applicants at SZABIST.

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). SZABIST is one of the highest ranked universities in the country.

SZABIST is a registered member of the International Association of Universities (IAU), Paris; Association of Commonwealth Universities (ACU), London; Association to Advance Collegiate Schools of Business (AACSB), Singapore; Federation of the Universities of Islamic World (FUIW), Rabat; Asia University Federation (AUF), Seoul; and Management Association of Pakistan, Karachi.


Asia Inc, a leading Asian Magazine, has ranked SZABIST among the top MBA Schools of South Asia in its Asia’s Best MBA Schools Survey for two consecutive years (2003, 2004). SZABIST is one of the top 15 business schools from South Asia ranked in Asia Inc.

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

Application Processing Fee: Rs. 1,500 (Pakistani nationals) / $45 (Foreign nationals)
Admission Fee: Rs. 20,000 (Pakistani nationals) / $500 (Foreign nationals)
Security Deposit (refundable): Rs. 5,000 (Pakistani nationals) / $165 (Foreign nationals)
Students Activity Charges: Rs. 500 per semester for Pakistani nationals; $15 per semester for foreign nationals
(Tentative) Tuition Fee per semester: Rs. 73,100 for Pakistani nationals; $1,700 per semester for foreign nationals
(full load of five courses per semester)

SZABIST reserves the rights to revise the fees/ withdrawal of scholarship without any prior notice.

Scholarships: 100% of tuition fee are available to needy and meritorious continuing students

Other programs at SZABIST

SZABIST also offers the following programs; BBA, BE Mechatronics, BS (Media Sciences), BS (Social Sciences), BS (Biosciences), MBA, MBA (Banking & Finance), MPM, PGD in T.V Production/Advertisement, Masters in T.V Production/Advertisement, MS (Media Studies), MS/PhD (Management Sciences and Social Sciences) and the University of London International Program of LLB and the BA (Hons) Business Studies (in affiliation with University of Wales at Newport, UK). Separate brochures of these programs are available at the Admission Office.

Last Date to Apply: June 15, 2013
Online Admission Test: June 20-26, 2013
Interviews: July 2-8, 2013
Classes Begin: August 12, 2013

APPLY ONLINE:
Log on to: http://admissions.szabist.edu.pk.
Online applications can also be filed at SZABIST campus.
For Further Information Please contact:
F-108, Clifton, Karachi, Pakistan, Tel: (021) 35821536-42, Ext: 111, 108, 112
Fax: (021) 35821537, E-mail: admissions@szabist.edu.pk, www.szabist.edu.pk
## Curriculum

### FIRST YEAR

**Fall Semester**
- English Composition and Comprehension
- Introduction to Computing
- Calculus and Analytical Geometry
- Islamiat & Pakistan Studies / Humanities
- Fundamentals of Programming

**Spring Semester**
- Object Oriented Programming
- Technical and Business Writing
- Physics and Basic Electronics
- Multivariate Calculus
- Discrete Mathematical Structures

### THIRD YEAR

**Fall Semester**
- Introduction to Software Development
- University Elective-1
- Software Engineering Concepts
- Computer Architecture
- Human Computer Interaction

**Spring Semester**
- CS Elective-1
- Design & Analysis of Algorithms
- CS Elective-2
- Numerical Computing
- Compiler Construction

### SECOND YEAR

**Fall Semester**
- Communication & Presentation Skills
- Linear Algebra & Differential Equations
- Statistics & Probability
- Digital Logic Design
- Data Structures and Algorithms

**Spring Semester**
- Computer Network & Data Communications
- Relational Database Systems
- Computer Organization and Assembly Language
- Finite Automata Theory and Formal Languages
- Operating Systems Concepts

### FORTH YEAR

**Fall Semester**
- Senior Design Project-I
- Professional Practices
- Artificial Intelligence
- CS Elective-3
- CS Elective-4

**Spring Semester**
- Senior Design Project-II
- University Elective-2
- CS Elective-5
- CS Elective-6
- CS Elective-7

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All courses may not necessarily be offered every year. Alternate courses may be substituted as and when needed.
MS (Computer Science)

SZABIST offers MS (Computer Science) degree with majors in Software Engineering, Information Technology and Information Security Management.

MS Program

The MS (Computer Science) program is an evening program only and consists of 33 credits including Thesis/Research Project.

- For students with a 4-year BS or MCS degree, the MS Program is a 2-years program. 9 MS courses and Thesis/Research Project/Course work (33 credits) are needed to graduate.

- For students with a 4-year professional degree (BE, MSc, etc), the MS Program is a 2-year program. Deficiency/conversion courses and 9 MS courses and Thesis/Research Project/Course work are needed to graduate.

- For students with a 3-year BCS degree, the MS Program is a 3-year program. One year of deficiency conversion courses and 9 MS courses and Thesis/Research Project/Course work are needed to graduate.

Admission Requirements

For direct admission to the fifth year MS, the candidate must possess BS/MCS degree (16 years relevant university education) with minimum 55% marks/CGPA 2.50 from an HEC recognized university in the relevant field of study.

For admission to the MS Program, the candidate must possess a Bachelors degree with minimum 55% marks/CGPA 2.50 from an HEC recognized university in the relevant field of study. The candidate must also have computer and mathematics background. GAT General Minimum 50% score.

An entrance test and group discussion/interview will be given to all applicants at SZABIST.

Fee

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost (Pakistani nationals)</th>
<th>Cost (Foreign nationals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Processing Fee:</td>
<td>Rs. 1,500</td>
<td>$45</td>
</tr>
<tr>
<td>Admission Fee:</td>
<td>Rs. 20,000</td>
<td>$500</td>
</tr>
<tr>
<td>Security Deposit (refundable):</td>
<td>Rs. 5,000</td>
<td>$165</td>
</tr>
<tr>
<td>Student Activity Charges:</td>
<td>Rs. 500</td>
<td>$15</td>
</tr>
<tr>
<td>Tuition Fee per semester:</td>
<td>Rs. 69,000</td>
<td>$1,560</td>
</tr>
</tbody>
</table>

SZABIST reserves the right to revise the fees/withdrawal of scholarship without any prior notice.
PhD (Computing)

SZABIST offers a PhD Degree in Computing that can be completed during the evenings in three years after the MS degree. 6 PhD courses and dissertation are required to graduate. A total of 48 credit hours must be completed.

*Specializations of Study (Computing)


Research

SZABIST strongly encourages the publication of research findings of Independent Studies, Thesis and Dissertation in research journals and conferences. SZABIST also publishes its own research journals, the Journal of Independent Studies & Research and holds one National Research Conferences and one International Conference annually.

Admission Requirements

For admission to the PhD Program, the candidate must have:

- 17-18 years of education in a related field with minimum 60% Marks/CGPA 3.00 from an HEC recognized institution.
- GAT Subject/GRE with minimum 60% score
- Passed the SZABIST PhD entrance examination
- Passed the Selection Interview with the SZABIST Graduate Committee.

Fee

Application Processing Fee: Rs. 1,500 (Pakistani nationals)/$45 (foreign nationals)
Admission Fee: Rs. 20,000 (Pakistani nationals)/$500 (Foreign nationals)
Security Deposit (refundable): Rs. 5,000 (Pakistani nationals)/$165 (Foreign nationals)
Student Activity Charges: Rs. 500 per semester (Pakistani nationals)
$15 (Foreign nationals)
Tuition Fee: (Tentative) Rs. 17,250 per course for Pakistani nationals;
$390 per course for Foreign nationals (full load of three courses per semester)

SZABIST reserves the right to revise the fees/withdrawal of scholarship without any prior notice.

Scholarships

Financial Assistance in the form of Teaching/Research Assistantship is available to needy and meritorious students. Candidates should apply early.