SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

SELF-ASSESSMENT REPORT

BS Computer Science (BSCS)

Larkana Campus

Spring 2015

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SELF-ASSESSMENT REPORT

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Introductions

SZABIST- Quality Enhancement Cell (QEC) since its inception has been active in promoting its core function of bringing standardization to ***SZABIST***'s academic programs in line with the guidelines enunciated by the Higher Education Commission. In Larkana campus the assessment process has been introduced by QEC in spring 2015 to keep the uniformity in all programs in relation to enhance quality in academics of the campus on prescribed standards.

QEC conducted a number of workshops to create awareness of the Self-Assessment process and its significance in further improving the quality of education at ***SZABIST***. The IR/QEC initiated the Self- Assessment Process for the Bachelor of Business Administration (BBA) program and Bachelors of computer sciences (BSCS) programs offered at ***SZABIST*** Larkana campus. The highlights of the process were as follows:

1. Nomination of Program Team (PT)

The PT was nominated by HoC, Mr. Muhammad Bux Soomro, on March 25th, 2015. Following are the members of the PT:

(i) Mr. MB Soomro
(ii) Mr. Murtaza Siddiqi
(iii)Mr. Naveed Ghani
(iv) Mr. Sarmad Soomro

2. Submission of PT Report

The PT submitted the report on July 23rd, 2015. The QEC examined the report, identified shortcomings and communicated the same to the PT. After incorporating QEC suggestions, the report was finalized on 2015.

3. Nomination of Assessment Team (AT)

The AT was nominated by the Head of IR/QEC, Dr. Muhammad Altaf Mukati and Ms. Faryal Shahabuddin on August 10th, 2015. Following were the members of the AT:

(i) Mr. Imran Junejo
(ii) Mr Ahsan Kumbhar
(iii) Ms. Rabail Gul

4. Date of Submission of AT Report

The AT Report was submitted on September 5th, 2015.

5. AT Findings and Recommendations

Following are the recommendations made by the AT to overcome the major shortcomings in the program:

(i) There is less participation of students in IT exhibition, in order to increase participation, Exposure should be given to them.
(ii) There is no ethical and professional activities are conducted to groom faculty, therefore mix of activities should be planned as soon as possible.
(iii) There is repetition in PT Report, therefore it should be specific to the point discussed.
(iv) There is no BSCS faculty member in Executive development center, so there must be BSCS member.

6. Preparation of Assessment Results Implementation Plan Summary

The AT prepared the Assessment Results Implementation Plan Summary by highlighting the weaknesses of the program and suggesting remedial measures. The Computer Sciences Department plans to implement the suggested corrective measures in the near future to improve the quality of education delivered at ***SZABIST***.

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SELF-ASSESSMENT REPORT

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Larkana Campus

Program Team Report

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CRITERION 1: PROGRAM MISSION, OBJECTIVES AND OUTCOMES

Standard 1-1	Program Measurable Objectives
Standard 1-2	Program Outcomes
Standard 1-3	Assessment Results and Improvement Plans
Standard 1-4	Overall Performance Using Quantifiable Measures

Criterion 1: Program Mission, Objectives and Outcomes

Standard 1-1 Program Measurable Objectives

a. Document institution, department, and program mission statements

Mission Statements

1. Mission Statement of Shaheed Zulfikar Ali Bhutto Institute of Science and Technology

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

2. Mission Statement of Department

The department aims to equip students with requisite; technical breadth and communication skills to become innovators and leaders in the field of Computer Science and related disciplines. The department strives for excellence through imparting knowledge comprehensively in Computer Science with an emphasis on research in collaboration with industry, dissemination through scholarly publications and service to professional societies, the community and the nation.

3. Mission Statement of BS Computer Science Program

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

b. Program Objectives

The objectives of the program are to provide broad and basic education in Computer Science's multiple disciplines comprising of Software Engineering and Information Technology/ Telecommunications. The students will acquire sufficient fundamental knowledge to adapt quickly to the changes that are occurring, and will continue to occur, during their professional careers.

The goal is to educate and train students to become proficient in the state-of-the-art as well as emerging technologies in all key areas of the discipline. The students will acquire proficiency in design and construction of Computer Science applications. An important objective of the program is to offer a curriculum that evolves to keep pace with the rapid growth of technology in various areas of Computer Science.

Upon completion of their degree, the SZABIST BS Computer Science (CS) graduates will be able to:

1. Have a well-rounded education and a solid basis of knowledge in mathematics, basic sciences, technical sciences, communication and computer science.
2. Have a varied and balanced educational experience with an appropriate mix of theoretical knowledge and practical skills that will enable them to enter into and advance in the profession of computer science by adapting to emerging technologies and the ever changing needs of industry or the cutting edge computer science research.
3. Effectively design and construct software applications.
4. Work effectively in teams. This includes oral and written communication skills as well as collaborative skills.
5. Conduct themselves as responsible, ethical professionals and responsible citizens, who are aware of ethical issues and societal needs and can perform service to society and the computer science profession through participation in professional societies, government, civic organizations, and humanitarian endeavors.

c. Program Outcomes (BS Computer Science)

To attain the educational objectives of the BS CS program, the department intends to produce the following measurable outcomes at the time of graduation. Graduates of the program will have:

1. The ability to utilize logic, mathematics, and physical sciences to model and solve Computer Science problems.
2. The ability to think critically, perform scientific analysis and develop solutions for typical Computer Science problems.

3. Proficiency in software design and development, design and analysis of algorithms, theory of programming languages, operating systems, theory of computation and computer architecture.
4. In depth knowledge in advanced and evolving areas in Computer Science.
5. The ability to acquire knowledge and skills independently.
6. The ability to communicate effectively using technical writing and visual and oral presentations.
7. Have an understanding of professional, ethical and social responsibilities.
8. The ability to work within teams and in multi-disciplinary environments.
9. Knowledge of contemporary issues.
10. Recognize the need for, and an ability to engage in, continuing professional development.

d. Describe how each Objective is aligned with the Program, and Institution Mission Statements

Objective	Alignment with program, and institution
Have a well-rounded education and a solid basis of knowledge in advanced technical and research courses	To provide quality advanced technology education to the students with assignments and projects based on recent technologies
Effectively design and construct software applications.	Practical skills of the discipline through class room teaching, laboratory sessions and projects
Have a varied and balanced educational experience with an appropriate mix of theoretical knowledge and practical skills that will enable them to enter into and advance in the profession of computer science by adapting to emerging technologies and the ever changing needs of industry or the cutting edge computer science research.	Focusing on producing leading technology graduates who are able to innovate and perform a significant role in the continuing transformation of the local and global society. Providing hi-tech scientific and technological assistance to the Pakistan industry
Conduct themselves as responsible, ethical professionals and responsible citizens, who are aware of ethical issues and societal needs and can perform service to society and the computer science profession through participation in professional societies, government, civic organizations, and humanitarian endeavors.	Perform a significant role in the continuing transformation of the local and global society. Providing a sound socio-economic and scientific base and infrastructure to Pakistan

Work effectively in teams. This includes oral and written communication skills as well as collaborative skills.	In the form of group projects and presentations during the degree.

Table 1.1: Objective is aligned with program, department, and institution mission statements

e. Main elements of the strategic plan to achieve program mission and objectives

An Integrated Academic Experience: An integrated academic environment fosters connections among disciplines, between faculty and students, and with campus and community. Such an integrated experience is rich in opportunities for exploration, discovery and learning. It provides diverse perspectives, and it prepares students to be thoughtful competent citizens able to contribute to the common good. We achieve this goal through ongoing collaborative efforts that involve administration, faculty, students and staff.

Diverse Curriculum: Keeping in mind that a well-designed academic curriculum needs not only to be comprehensive and effective but also flexible. Therefore, as new technology emerges and demands of the field evolve, the curriculum is revised without losing its commitment to quality. For this purpose, a wide range of core and electives subjects are offered to ensure that the curriculum is responsive to the ever changing needs of computer science field.

Research and Development: Student research, especially which is connected to real world concerns, not only enhances critical thinking and analytical skills for students, it also enriches research scholarship and benefits the country. Computer Science Department engage students as researchers by integrating research opportunities into the curriculum (particularly through lab projects)

Professional Career Building: Executive Development Center (EDC) facilitates arranging Internships for all students and acts as a liaison between the industry and the students. Currently, at SZABIST Larkana the senior most BSCS batch is in their 6th semester, hence from summer 2015 they will commence with internships.

Co-curricular Leaning: In order to promote learning that is active, self-motivated, exploratory and attentive, a wide range of learning opportunities, both curricular and co-curricular are used. It includes student research, internships and co-curricular opportunities, such as students gaming society and sports society.

Furthermore, an alumni dinner and function was organized last year and SZABIST Larkana is looking forward to organize such event annually so that students get to know about SZABIT graduates and get motivated with their professional career success.

f. Program Objective Assessment

Objective	How Measured	When Measured	Improvement /Issues	Improvements Made
Have a well- rounded education and a solid basis of knowledge in advanced technical and research courses	Course Outline, midterm examination, final examination, assignments and reports	Every Semester	None	Faculty after every semester look forward to improve the curriculum with Board of studies approval to bring in new changes.
Effectively design and construct software applications.	Final examination, assignments and reports	Every Semester	Industry collaboration	Software exhibition or context among batches with internal or external judges
Have a varied and balanced educational experience with an appropriate mix of theoretical knowledge and practical skills that will enable them to enter into and advance in the profession of computer science by adapting to emerging technologies and the ever changing needs of industry or the cutting edge Computer science research.	Course exams, Practical Reports, Projects, Assignments,	Every Semester	Need to bring in guest speakers from industry	Guest speakers are invited to a class session
Conduct themselves as responsible, ethical professionals and responsible citizens, who are aware of ethical issues and societal needs and can perform service	Group assignments, final reports and presentation.	Every Semester	No course related to this	Faculty members discuss such issues during lecture.

to society and the computer science profession through participation in professional societies, government, civic organizations, and humanitarian endeavors				
Work effectively in teams. This includes oral and written communication skills as well as collaborative skills.	Group projects, Group assignments and presentations	Every semester	Final semester Projects	Oral communication and written skills course

Table 1.2: Program Objectives Assessment [1]

Standard 1-2 Program Outcomes

a. Program Outcomes and Objectives Matrix (BS Computer Science)

Learning Outcomes	1	2	3	4	5
1	✓	✓	✓	✓	
2	✓	✓	✓	✓	
3	✓	✓	✓	✓	
4	✓	✓	✓		
5		✓		✓	✓
6				✓	✓
7					✓
8			✓	✓	✓
9	✓	✓	✓		
10		✓			✓

Table 1.3: Outcomes versus Objectives[2]

[1] Table 1.2 of PT Report is the Table 4.1 (Program Objectives Assessment) of AT Report
[2] Table 1.3 of PT Report is the Table 4.2 (Outcomes versus Objectives) of AT Report

b. Employer Survey

The BSCS program was launched in Spring 2013 and no batch has been graduated up till now therefore Employer Survey is not applicable.

c. Alumni Survey

The BSCS program was launched in Spring 2013 and no batch has been graduated up till now therefore Alumni Survey is not applicable.

d. Graduating Student Survey

The BSCS program was launched in Spring 2013 and no batch has been graduated up till now therefore Graduating Student Survey is not applicable.

Standard 1-3 Assessment Results and Improvement Plans

As none of the batches have graduated but as per observation following plans and decisions are considered and discussed.

a. Describe the action taken based on the periodic assessments

Board of studies meetings are held to evaluate and upgrade the course contents

- Students counseling is done for every course encourage students and to solve any issues regarding the particular subject.
- Students are required to attend different workshops and seminars
- Course evaluations are conducted.

b. Describe major future program improvement plans based on recent assessments

- Introduce new courses and update current courses curriculums to satisfy the market needs.
- Changing course delivery from traditional classroom teaching to case-based teaching methodology.

c. Strengths and weaknesses of the program

Strengths:

- Faculty from diverse industry/corporate backgrounds

- Research based assignment and projects included as part of curriculum

Weaknesses:

- Require stronger industry collaboration
- Training opportunities offered to faculty

d. Significant future plans for the program

Changing course delivery from traditional classroom teaching to case-based teaching methodology

Standard 1-4 Overall Performance Using Quantifiable Measures

a. Indicate the CGPA of successful students per semester, time required to complete the program, and dropout ratio of students per semester (last 2 years)

Semesters	CGPA
Spring 2015	2.78
Fall 2014	2.377
Spring 2013	2.77
Fall 2013	2.74

Table 1.4: Average CGPA

Year	Dropouts	Enrolled students	Dropout ratio
2013	02	24	0.083
2014	05	18	0.277

Table 1.5: Drop-out Ratio

b. Indicate the percentage of employers that are strongly satisfied with the performance of the department's graduates. Use Employer's survey.

The BSCS program was launched in Spring 2013 and no batch has been graduated up till now therefore Employer Survey is not applicable.

c. Percentage of student's evaluation/assessment results for all the courses and faculty. Use Teacher evaluation form.

Year	Semester	Faculty & Courses Rating					
		Excellent	Very Good	Good	Satisfactory	Not Satisfactory	Poor
2013	Fall	40	60	0	0	0	0
2014	Spring	40	27	27	0	7	0
	Fall	45	35	15	5	0	0
2015	Spring	74	19	4	0	4	0
	Fall	79	12	9	0	0	0
2016	Spring	69	14	5	2	5	5

Table 1.6: Faculty & Courses Rating

d. Percentage/List/Number of research activities i.e. journal publications, funded projects, conference publications per faculty and per year, and the faculty awarded excellence in research

- **Details of Paper published**

List of Publication		
Sir M.B Soomro		
1	Task Conflict and Its Relationship with Employee's Performance	2011
2	4rth SZABIST IRC, will be held on December 13, 2014. Title: Semantic Integration of Clinical Data with HL 7 Data Schema has been accepted for conference presentation	2014
Sir. Naveed Ghani		
1	Naveed Ghani, Nadia Ansari, Hitesh Kumar, Rizwan Iqbal, "Performance Analysis of LTE and IEEE 802.16 Wi-Max in Terms of Service and Cost Via MATLAB; Scenario Based ROF Amalgamation as Backhaul Technology" International Conference on Advancement in Engineering, Technology and Management, held in Thailand.	July 26, 2014
2	Naveed Ghani, Nadia Ansari, Hitesh Kumar, Rizwan Iqbal, "ROF v/s traditional fiber as a backhaul technology; A comparative study of Ethernet and cellular network using Matlab" International Young Engineer Convention, University of Engineering and Technology, Lahore, Pakistan.	April 18, 2014
3	Naveed Ghani, Nadia Ansari, Hitesh Kumar, Rizwan Iqbal, "Performance analysis of analysis of ETTH and FTTH; A comparative study carried out on Matlab" International Young Engineer Convention, University of Engineering and Technology, Lahore, Pakistan.	April 18, 2014
4	Naveed Ghani, Nadia Ansari, Hitesh Kumar, Rizwan Iqbal, "Performance analysis of LTE and IEEE 802.16 WiMax via Matlab; Scenario based ROF amalgamation as backhaul technology" International Young Engineer Convention, University of Engineering and Technology, Lahore, Pakistan.	April 18, 2014
5	Naveed Ghani, Samreen Javed, "Survey based data security evaluation in Pakistan financial institutions against malicious attacks" International Conference of Computer Networks and Security 2013, held in Paris, France.	November 06, 2013

6	Naveed Ghani, Hina Toor, Zainab Hussain, "Improvements in the Current Setup of Distance Learning in Pakistan through IPTV" International Journal of Computer Applications (IJCA) Vol. #44, Article #21	April 30, 2012
7	Naveed Ghani, Moiz Ansari, "RFID Based Library Management Systems" Symposium Information & Computer Sciences 2011.	June 04, 2011
Sir. Sarmad Soomro		
1	Soomro, S., Ahmad, W. F. W., & Sulaiman, S. "Evaluation of Mobile Games with Playability Heuristic Evaluation System" International Conference on Computer and Information Sciences (ICCOINS) (pp. 1–6). http://doi.org/10.1109/ICCOINS.2014.6868403	June 6, 2014
2	Soomro, S., Ahmad, W. F. W., & Sulaiman, S. "Evaluating Educational Mobile Games for School Children" ISICO 2013, http://is.its.ac.id/pubs/oajis/index.php/home/detail/1230/Evaluating-Educational-Mobile-Games-for-School-Children	December 2, 2013
3	Soomro, S., Ahmad, W. F. W., & Sulaiman, S. "Evaluation of Mobile Games Using Playability Heuristics" In Third International Visual Informatics Conference, IVIC 2013 (pp. 264–274). Springer International Publishing. http://doi.org/10.1007/978-3-319-02958-0_25	November 12, 2013
4	Soomro, S., Ahmad, W. F. W., & Sulaiman, S. "A preliminary study on heuristics for mobile games" 2012 International Conference on Computer & Information Science (ICCIS) (Vol. 2, pp. 1030–1035). IEEE. http://doi.org/10.1109/ICCISci.2012.6297177	June 12, 2012

Table 1.8: List of Publication

e. Faculty and student surveys results to measure the administrative services provided

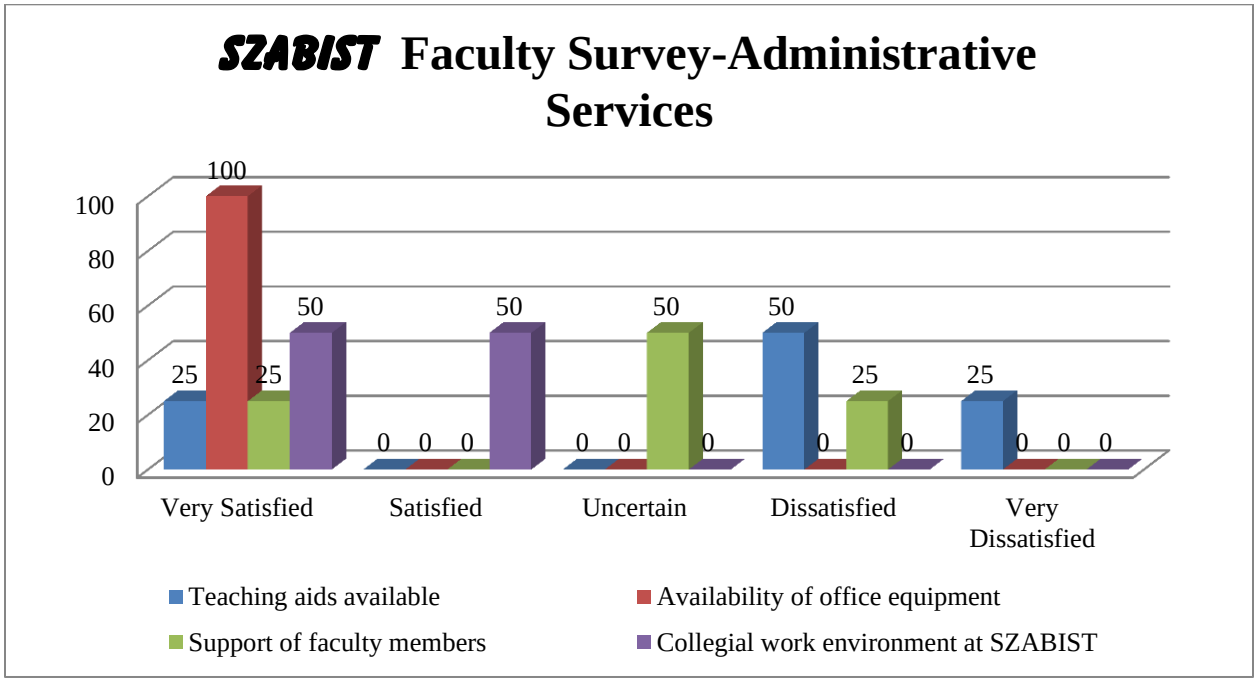

Figure 1.1

At present Graduating Student Survey and Alumni Survey is not applicable on BSCS program Larkana Campus as no batch of graduates has been passed out.

CRITERION 2: CURRICULUM DESIGN AND ORGANIZATION

Standard 2-1	Courses vs. Objectives
Standard 2-2	Theory, Problem Analysis / Solution and Design in Program
Standard 2-3	Mathematics & Basic Sciences Requirements
Standard 2-4	Major Requirements as Specified by Accreditation Body
Standard 2-5	Humanities, Social Sciences, Arts, Ethical, Professional & Other Requirements
Standard 2-6	Information Technology Content Integration throughout the Program
Standard 2-7	Communication Skills (Oral & Written)

Criterion 2: Curriculum Design and Organization

Standard 2-1 Courses versus Objectives

a. Title of Degree Program

Bachelors in Computer Science (BSCS)

b. Definition of Credit Hour

- A credit hour means teaching a theory course for 60 minutes each week throughout the semester.
- One credit hour in laboratory or practical work / project would require lab contact of three hours per week throughout the semester.
- The credit hours are denoted by two digits within brackets with a comma in between. The first digit represents the theory part while the second (right side) digit represents the practical. Thus 3(3,0) means three credit hours of theory, while 4(3,1) means a total of four credit hours, of which three are of theory while one credit hour is for laboratory.
- The weekly contact hours of a 3(3,0) course will be three, the contact hours of a 4(3,1) course will be six.
- The contact hours during each week of the Summer Session will be doubled to ensure that the course is completely taught in a semester with half the duration compared with a regular (Fall/Spring) semester.

c. Degree Plan[3]

CORE COURSE | ELECTIVES

1	2	3	4	5	6	7	8
CS1111 English Composition and Comprehension (3,0)	CS1108 Object Oriented Programming (2,1)	CS1205 Communication & Presentation Skills (3,0)	CS2302 Computer Network & Data Communications (2,1)	CS2417 Introduction to Software Development (3,1)	CS3607 CS Elective 1(3,0)	CS4704 Senior Design Project - I (2,1)	CS4804 Senior Design Project - II (2,1)
CS1117 Introduction to Computer Science (2,1)	CS1211 Technical and Business Writing (3,0)	CS2305 Linear Algebra & Differential Equations (4,0)	CS2421 Relational Database Systems (3,1)	CS2315 University Elective - 1 (3,0)	CS3611 Design & Analysis of Algorithms(3,0)	CS4805 Professional Practices (3,0)	CS4802 University Elective – 2 (3,0)
CS1204 Calculus and Analytical Geometry (3,0)	CS1215 Physics and Basic Electronics (3,1)	CS1212 Statistics & Probability (3,0)	CS2411 Computer Organization and Assembly Language(3,0)	CS3517 Software Engineering Concepts(3,1)	CS3612 CS Elective 2 (3,0)	CS5266 Artificial Intelligence (3,0)	CSxxxx CS Elective 5 (3,0)
CS1206 Islamiat& Pakistan Studies / Humanities (3,0)	CS2414 Multivariate Calculus (3,0)	CS2317 Digital Logic Design (3,1)	CS2314 Finite Automata Theory and Formal Languages (3,0)	CS3521 Computer Architecture (3,1)	CS3619 Numerical Computer Science (3,0)	CSxxxx CS Elective 3 (3,0)	CSxxxx CS Elective 6 (3,0)
CS1118 Fundamentals of Programming (3,1)	CS3505 Discrete Mathematical Structures (3,0)	CS2313 Data Structures and Algorithms (3,1)	CS2318 Operating Systems Concepts(3,1)	CS5273Human Computer Interaction (3,0)	CS3624 Compiler Construction (3,0)	CSxxxx CS Elective 4 (3,0)	CSxxxx CS Elective 7 (3,0)

Table 2.1: Degree Plan

[3] Source of information is: Program Manager BS Computer Science Department, Course catalogue

d. Curriculum Course Requirement

Semester	Category (Credit Hours)			
	Math and Basic Science	**Core Courses**	**Humanities and Social Sciences**	**Other**
1	CS1204 Calculus and Analytical Geometry		CS1111 English Composition and Comprehension (3,0)	CS1118 Fundamentals of Programming (3,1)
1			CS1206 Islamiat& Pakistan Studies / Humanities (3,0)	CS1117 Introduction to Computer Science (2,1)
2	CS2414 Multivariate Calculus (3,0	CS1215 Physics and Basic Electronics (3,1)	CS1211 Technical and Business Writing (3,0)	CS1108 Object Oriented Programming (2,1)
2		CS3505 Discrete Mathematical Structures (3,0)		
3	CS2305 Linear Algebra & Differential Equations (4,0)	CS2317 Digital Logic Design (3,1)	CS1205 Communication & Presentation Skills (3,0)	CS2313 Data Structures and Algorithms (3,1)
3	CS1212 Statistics & Probability (3,0)			
4		CS2411 Computer Organization and Assembly		CS2302 Computer Network & Data Communications (2,1)

		Language(3,0)		
4		CS2314 Finite Automata Theory and Formal Languages (3,0)		CS2421 Relational Database Systems (3,1)
4				CS2318 Operating Systems Concepts(3,1
5		CS2417 Introduction to Software Development (3,1)		CS2315 University Elective - 1 (3,0)
5		CS3521 Computer Architecture (3,1)		CS3517 Software Engineering Concepts(3,1)
5				CS5273 Human Computer Interaction (3,0)
6		CS3611 Design & Analysis of Algorithms(3,0)		CS3607 CS Elective 1(3,0)
6		CS3624 Compiler Construction (3,0)		CS3612 CS Elective 2 (3,0)
6				CS3619 Numerical Computer Science (3,0)
7		CS5266 Artificial		CS4704 Senior Design Project - I

		Intelligence (3,0)		(2,1)
7				CS4805 Professional Practices (3,0)
7				CSxxxx CS Elective 3 (3,0)
7				CSxxxx CS Elective 4 (3,0)
8				CS4804 Senior Design Project - II (2,1)
8				CS4802 University Elective – 2 (3,0)
8				CSxxxx CS Elective 5 (3,0)
8				CSxxxx CS Elective 6 (3,0)
8				CSxxxx CS Elective 7 (3,0)

Table 2.2: Curriculum Course Requirements [4]

e. Describe how the program content (courses) meets the program objectives

The curriculum is consistent and supports the program's documented objectives.

The courses that are being offered are of programming, algorithms and data structures, databases, software engineering, senior projects, etc. which on the whole contribute in meeting our program objectives which is about applying the knowledge of Computer Science and mathematics in the appropriate areas. Students learn how to work together as team members as well as perform individually. Students in the initial semesters are offered courses of English composition and comprehension, oral communication and presentation skills which play a vital role in structuring a student's approach towards analyzing technical information as well as general information and build confidence level to perform and present in front of large audiences.

[4] Table 2.2 of PT Report is the Table 4.3 (Curriculum Course Requirements) of AT Report

f. Courses versus Outcomes. List the courses and tick against relevant outcomes.

Course	Title	1	2	3	4	5	6	7	8	9	10
CS1102	Calculus and Analytical Geometry	✔				✔				✔	
CS1103	Physics-I					✔				✔	
CS1111	Eng Comp. & Comprehension					✔		✔			
CS1117	Introduction to Computing	✔	✔		✔	✔	✔		✔	✔	
CS1206	Islamiat & Pak. Studies / Humanities					✔		✔			
CS1209	Programming Fundamentals	✔	✔	✔	✔	✔	✔		✔	✔	✔
CS1108	Object Oriented Programming	✔	✔	✔	✔	✔	✔		✔	✔	✔
CS1211	Technical and Business Writing					✔	✔	✔	✔	✔	
CS1212	Statistics and Probability	✔				✔				✔	
CS3505	Discrete Mathematical Structures	✔				✔				✔	
CS4xxx	Core					✔					
CS4xxx	University Elective					✔					
CS2311	Communication and Presentation Skills					✔	✔	✔	✔	✔	
CS2312	Digital Logic & Comp Architecture	✔	✔	✔	✔	✔	✔		✔	✔	✔
CS2313	Data Structures and Algorithms	✔	✔	✔	✔	✔	✔		✔	✔	✔
CS4xxx	Core					✔					
CS4xxx	University Elective					✔					
CS4xxx	University Elective					✔					
CS2303	Operating Systems		✔		✔	✔				✔	✔
CS2412	Database Systems	✔	✔		✔	✔	✔		✔	✔	✔
CS2413	Linear Algebra and Applications	✔				✔					
CS4xxx	Core					✔					
CS4xxx	Core					✔					
CS4xxx	University Elective					✔					
CS2302	Computer Networks and Data Communication	✔	✔	✔	✔	✔	✔		✔	✔	✔
CS3512	Software Engineering – I	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CS4xxx	Core					✔					
CS4xxx	Elective					✔					
CS4xxx	University Elective					✔					
CS4xxx	University Elective					✔					
CS3612	Software Engineering – II	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CS4xxx	Core					✔					

CS4xxx	Core					✔					
CS4xxx	Elective					✔					
CS4xxx	Elective					✔					
CS4xxx	University Elective					✔					
CS4709	Senior Design Project - I	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CS4806	Business and Technology Ethics					✔			✔	✔	✔
CS4xxx	Core					✔					
CS4xxx	Core					✔					
CS4xxx	Elective					✔					
CS4xxx	Elective					✔					
CS4802	Research Report	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CS4809	Senior Design Project – II	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CS4xxx	Elective					✔					
CS4xxx	Elective					✔					
CS4xxx	University Elective					✔					
CS4xxx	University Elective					✔					

Table 2.3: Courses versus Outcomes[5]

Standard 2-2 Theory, Problem Analysis/ Solution and Design in Program

Theoretical background, problem analysis and solution design must be stressed within the program's core material.

Elements	**Courses**
Theoretical Background	CS1204 CS1111 CS1117 CS1206 CS1211 CS1205 CS2414 CS1215 CS2314
Problem Analysis	CS1212 CS2313 CS2421 CS2411 CS2305 CS3619 CS4802
Solution Design	CS1108 CS5266 CS4704 CS4804

Table 2.4: Standard 2-2 Requirements [6]

[5] Table 2.3 of PT Report is the Table 4.4 (Courses versus Outcomes) of AT Report.
[6] Table 2.4 of PT Report is the Table 4.5 (Standard 2-2 requirements) of AT Report

Standard 2-3 Mathematics & Basic Sciences Requirements

The curriculum must satisfy the core requirements for the program, as specified by the respective accreditation body.

Program	Computing Core	Supporting Courses	General Education	Electives
BS Computer Science	Introduction to Computer Science	Calculus and Analytical Geometry	English-I (Functional English)	Financial Accounting
	Programming Fundamentals	Probability and Statistics	English-II (Technical and Report Writing)	Financial Management
	Object Oriented Programming	Linear Algebra	English-III (Communication Skills)	Human Resource Management
	Discrete Structures	Electromagnetism	Islamic and Pakistan Studies	Marketing
	Data Structure and Algorithms		Professional Practices	Economics
	Digital Logic and Design			Psychology
	Operating Systems			International Relations
	Introduction to Database Systems			Foreign/Regional Language (French, German, Sindhi, Punjabi, Urdu etc.)
	Introduction to Software Engineering			Philosophy
	Computer Communications and Networks			
	Human Computer Interaction			
	Senior Design Project			
RED: HEC COURSE				
Total Courses: 25 **Total Credit Hours: 82**				

Table 2.5: Standard 2-3 Requirements

Standard 2-4 Major Requirements as Specified by Accreditation Body

The curriculum must satisfy the major requirements for the program as specified by HEC and NCEAC the respective accreditation body/councils.

Program	Computing Core	Supporting Courses	General Education	Electives
BS Computer Science	Introduction to Computer Science	Calculus and Analytical Geometry	English Comprehension and Composition	IT Innovations
	Programming Fundamentals	Probability and Statistics	Technical and Report Writing	Applied Data Mining
	Object Oriented Programming	Linear Algebra	Communication and Presentation Skills	Embedded Programming
	Discrete Structures		Islamic and Pakistan Studies	Android Application Development
	Data Structure and Algorithms		Professional Practices	Advanced Internet Architecture
	Digital Logic and Design			IOS development
	Operating Systems			Network Security and Encryption
	Introduction to Database Systems			Advanced Telecommunication Technologies
	Introduction to Software Engineering			Wireless and Mobile Technologies
	Computer Communications and Networks			Ethical Hacking
	Human Computer Interaction			Linux Administrator
	Senior Design Project			Auditing Information Systems
RED: HEC COURSE				
Total Courses:40 **Total Credit Hours:130**				
Red - HEC **Purple-NCEAC** **Green - SZABIST specific course** **Blue - HEC course**				

Table 2.6: Standard 2-4 Requirements

Standard 2-5 Humanities, Social Sciences, Arts, Ethical, Professional & Other Requirements

The curriculum must satisfy general education, arts, and professional and other discipline requirements for the program, as specified by the respective accreditation body/council.

Program	General Education	Others
BS Computer Science	English Comprehension and Composition	IT Innovations
	Technical and Report Writing	Applied Data Mining
	Communication and Presentation Skills	Embedded Programming
	Islamic and Pakistan Studies	Android Application Development
	Professional Practices	Advanced Internet Architecture
		IOS development
		Network Security and Encryption
		Advanced Telecommunication Technologies
		Wireless and Mobile Technologies
		Ethical Hacking
		Linux Administrator
		Auditing Information Systems

Table 2.7: Standard 2-5 Requirements

Standard 2-6 Information Technology Content Integration throughout the Program

a. List the courses required by the Accreditation Body.

Program	IT COURSES
BS Computer Science	Introduction to Computers Programming fundamentals Object oriented programming Data structures and algorithms Operating systems Computer organization and assembly language Computer networks and data communication Software Engineering Analysis of algorithms

Table 2.8: Standard 2-6 Requirements

b. Describe how they are applied and integrated throughout the program.

- Introduction to computer is an introductory course which is set to help students familiarize themselves more with Microsoft Office and the World Wide Web. This course sets foundations for the number of other courses that come along as it focuses towards relevant search criteria's and proper documentation of assignments and reports. Programming fundamental is an introduction towards programming in which 'C' language is thought. Programming fundamental is focused towards structured programming and is the foundation course towards other programming courses which are introduced later in the program to the students.
- Object oriented programming is offered after building the basics of students in the Programming Fundamental course. Syntaxes in both the courses are pretty much the same but differs as the view changes from structured towards object based where new concepts such as inheritance, polymorphism, etc… are introduced which help towards writing less and better code.
- Data Structures and Algorithm is another important course in which the C language is used to make students understand how better search codes, sorting codes, etc… are written which can help the students when writing code on similar patterns to MS Word or Operating system.
- Operating systems is a course in which students are acquainted with the core concepts of operating systems threading, paging, virtual memory, etc… to better understand how operating systems work.
- Computer organization is a course which helps understand the hardware of a computer how instruction sets, computer logic and arithmetic, data and control, peripherals and multiprocessors work and formulate the computer architecture
- Software Engineering is a course where students are familiarized with
    1. Software Processes & Process Improvement
    2. Software Design and Implementation
    3. Software verification, validation and testing
    4. Quality Assurance
    5. Requirements Engineering
    6. Software Project Management
    7. Risk Management
    8. Reengineering
    9. Integration & Testing

The above listed topics help students understand how software engineering helps make software better.

- Analysis of algorithms is yet another course helpful for students to understand the complexity of the code, the cost of the code and how particular code writing has an impact on the processing power.

Standard 2-7 Oral and written communication skills of the student must be developed and applied in the program

a. List the courses required by the Accreditation Body.

Program	COURSES
BS Computer Science	Technical and Business writing, English Composition and Comprehension Communication and Presentation Skills

Table 2.9: Standard 2-7 Requirements

b. Describe how they are applied and integrated throughout the program.

1. Technical and Business writing familiarizes with all the different formats used in business communication especially for the exchange of technical information between and within organizations.
2. English composition and comprehension is a course where practice of persuasive, descriptive and instructive styles of written communication helps to enhance accuracy and precision in writing the technical content.
3. Communication and presentation skill helps in confidence building to help students portray their skills and abilities to get the desired feedback and action in response.

CRITERION 3: LABORATORIES AND COMPUTING FACILITIES

Standard 3- 1	Lab Manuals / Documentation / Instructions
Standard 3- 2	Adequate Support Personnel for Labs
Standard 3- 3	Adequate Computing Infrastructure and Facilities

Criterion 3: Laboratories and Computer Science Facilities

Standard 3-1 Lab Manuals/Documentation/Instructions

SZABIST Larkana Campus is equipped with state of the art Computer Science facilities with high bandwidth connectivity to the internet. Moreover, Wi-Fi facility is available to all CS students; as a result, all CS students with Wi-Fi enabled devices can access all network resources wirelessly.

At the time of registration, a separate user ID and password is assigned to all students to access the ZABDESK Computer Labs are open to all students for Computer Science and printing facilities from 9:00 am to 5:00 pm from Monday to Saturday. Color and Laser printing is available at nominal cost.

To ensure the integrity of the network, students are not allowed to install their own software programs on SZABIST computers. Should additional software be required to under-take a course-related assignment, students first seek written approval of the concerned faculty and contact the Lab Administrator.

To handle sudden and abrupt power interruptions, a forty five minute power back up is available for all computers with UPS facility. A Lab Schedule is maintained to avoid any confusion and to allow all student groups to get adequate time at work stations. During open hours the use of the labs is based on first-come-first-serve basis.

a. Explain how students and faculty have adequate and timely access to the manuals/documentation and instructions

- Instructions are clearly written on the Notice boards pertaining to:
- Internet usage Proxy setting
- Proxy setting to use HEC Digital Library
- Instructions and settings to use printer
- Rules and Regulations for Lab usage
- Lab classes Schedule
- ZabDesk proxy settings
- However, no written, easy to use manuals are available in the computer labs for learning to use ZABDESK, Microsoft Office Programs etc.

b. Are the resources available sufficient for the program?

Yes, the resources are sufficient for the program.

Standard 3-2 Adequate Support of personnel for labs

1. Laboratories are furnished with a reasonable number of professional personnel's to provide continuous support to labs, students and faculty.
2. At SZABIST Larkana, we have four labs available that are functional.
3. A total of 4 dedicated staff members working in to ensure unhindered delivery of knowledge.

At SZABIST Larkana Campus, we have the following labs and Computer Science facilities functional at campus.

Laboratory Title	**Lab 1**
Location and Area	First Floor, Main Building
Adequacy for Instruction	Adequate for 55 students at a time. 55 desktops systems are available.
Objectives	For Internet usage For Printing of reports, assignments To access HEC Digital Library link, SZABIST e-library
Courses Taught	General Purpose Lab
Software available if Applicable	Windows 7 Professional operating system enabled workstations. Microsoft Office 2010 (Word, Excel, PowerPoint, MS Visio, MS Project) and other major utilities installed.
Safety Regulations	Available

Table 3.1: Computer Labs Information

Laboratory Title	**Lab 2**
Location and Area	First Floor, Main Building
Adequacy for Instruction	Adequate for 29 students at a time. 29 desktops systems are available. Projector available from Lab Administrator office on request by course instructor.
Objectives	For holding Lab sessions and course related sessions or exams for classes with less than 29 students. For Internet usage. For Printing of reports, assignments. To access HEC Digital Library, SZABIST e-library.

Courses Taught	Introduction to Computer Science, Programming Fundamentals , Object Oriented Programming, Computer Organization and Assemble Language, Software Development, Human Computer Interface,
Software available if Applicable	Windows 7 Professional operating system enabled workstations. NS2, CISCO Packet Tracer, Microsoft Office 2010 (Word,Excel, PowerPoint, MS Visio, MS Project),SPSS 14, MS Visual Studio 2013, NetBeans IDE, Turbo C++, Visual tools, Macromedia Flash, Adobe Acrobat reader, MSSQL Client and other utilities installed.
Safety Regulations	Available

Table 3.2: Computer Labs Information

Laboratory Title	**Physics Labs**
Location and Area	Second Floor, Main Building
Adequacy for Instruction	Available
Objectives	The main objective of this lab is to enlighten the students with the use of physics in their everyday lives and realize its broad spectrum.
Courses Taught	Physics
Software available if Applicable	N/A
Major Apparatus	DC supply and Oscilloscope, Vernier Calliper, Micrometer Screw Gauge, Capacitance Behavior, Photocell, Semiconductor Diode Circuit, Sodium Lamp
Safety Regulations	Available

Table 3.3: Computer Labs Information

Laboratory Title	**Digital Lab**
Location and Area	Ground Floor, Main Building
Adequacy for Instruction	Adequate for 20 students at a time. 04 Digital Oscilloscopes, Function generators, Digital Meter, DLD Simulation Kit are available
Objectives	The main objective of this lab is to enlighten the students with the use of different electronic devices and their applications.
Courses Taught	Digital Logic Designing and Computer Architecture
Software available if Applicable	N/A

Major Equipment	Function Generators, Power Supplies, Multimeters logic probes, Transistors, Resistors, Diodes, IC's, Capacitors, Inductors, Transformers
Safety Regulations	Available

Table 3.4: Computer Labs Information

Standard 3-3 Adequate Computer Science Infrastructure and Facilities

a. Describe how the Computer Science facilities support the Computer Science component of your program[7]

The BSCS program is heavily dependent on the facilities provided by SZABIST Larkana in the form of technology as listed below. All labs are equipped with the latest software(s) to help in imparting education in a professional manner. Before the start of each term, all computers are checked, repaired and replaced if needed. Once the term begins, things usually proceed without a hitch.

No.	Particular	Quantity	
1	**Servers**	7	
	A. Acer		1
	B. Dell Power Edge		2
	C. Intel Server		4
2	**Desktop Computers**	79	
3	**Color Scanners**	1	
4	**Printers**	2	
	A. Color Laser Printer		1
	B. Black Laser Printer		1
5	**Multimedia Projectors**	13	

Table 3.5: Computing facilities

b. Are there any shortcomings in the Computer Science infrastructure and facilities?

Based on the information given above, it can be concluded that the computer lab facilities are adequate and up to par for the BS Computing Program at SZABIST. Although the above facilities are shared between SZABIST programs, however the schedules are managed so that each program gets sufficient lab time.

[7] Source of information is: Lab Administrator

CRITERION 4: STUDENT SUPPORT AND ADVISING

Standard 4-1	Sufficient Frequency of Course Offering
Standard 4-2	Effective Faculty / Student Interaction
Standard 4-3	Professional Advising and Counseling

Criterion 4: Student Support and Advising

We believe that the students must have an adequate support to complete the program in a timely manner with ample opportunities to interact with their instructors and receive timely advice about program requirements and career alternatives. To meet this criterion the standards in this section must be fulfilled.

Standard 4-1 Sufficient Frequency of Course Offering

a. Provide the department's strategy for course offerings

We offered Core courses from the beginning and electives are offered from the 5th semester. If 75 or more students who are repeating the course register themselves, then we offer the same course again. We continually review course and curriculum as to make these markets competitive. Generally, the class strength is 8 to 13 students.

b. Explain how often core courses are offered

- Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.
- Core courses are offered from the first semester and electives are offered for the third and final year students. If 7 or more students who are repeating the course register then we offer the same course again. The curriculum and courses are revisited continually as per the market demand.
- Average class strength is 8 to 13 students.
- In a regular semester we offer all the required courses.
- If students require a specific elective course then that course is offered as and when required provided it satisfies the minimum number of student's criteria.

c. Explain how often elective courses are offered.

Each student has to take 9 electives in order to complete the program. Students select electives courses of their choice from the list of electives being offered.

d. Explain how required courses outside the department are managed to be offered in sufficient number and frequency

There is in-house Permanent faculty for all courses; therefore students do no need to go outside the department in order to take any course. Core courses are usually taught by our permanent faculty. There is only one condition in which students can take course from outside department if they are in the final semester and need course to complete their degree which is not available in that current semester.

Standard 4-2 Effective Faculty / Student Interaction

Describe how you achieve effective student/faculty interaction in courses taught by more than one person such as two faculty members, a faculty member, and a teaching assistant or a lecturer.

Courses in the major area of study are structured to ensure effective interaction between students and the faculty.

We achieve effective student / faculty interaction in courses because same teacher delivers the lecture and conducts the lab. Each faculty, visiting or permanent, has to allocate and spend extra time outside the classroom with students so as to counsel them.

Standard 4-3 Professional Advising and Counseling[8]

a. **Describe how students are informed about program requirements**

Students are informed about program requirements through advertisements, prospectus, brochures, student hand book, admissions department, program heads, and orientation, website and ZABDESK guideline.

b. **Describe the advising system and indicate how its effectiveness is measured**

The advising services are provided through EDC, professional seminars, orientations, workshops, teachers and Program Manager.

c. **Describe the student counseling system and how students get professional counseling when needed**

Each faculty posts counseling hours are on the door, so whenever student has a problem in studying, he/she can visit faculty in counseling hours or by appointment. Students can also discuss their problems with Program Manager when needed.

[8] Source: Discussion with Program Managers, Student Handbook

d. Indicate if students have access to professional counseling; when necessary

Students can access EDC, student advisors and faculty. We also arrange professional seminars for students in order to interact with market professionals.

e. Describe opportunities available for students to interact with practitioners, and to have membership in technical and professional societies

We have local chapter of IEEE and ACM in Karachi Campus; our students can become members of these societies. Students also interact with practitioners in seminars and workshops arranged by these societies. The EDC is dedicated to enhance the opportunities students have to be successful in their professional as well as personal life. We facilitate students to adapt to new and developing circumstances that challenge their growth as they progress through each grade. Such support may include academic guidance, career counseling, professional grooming, and student support.

The major responsibilities of SZABIST's Executive Development Center (EDC) are the following: Arranging internships, Job Placements, Graduate Directory, Alumni, Student grooming and counseling workshop etc.

CRITERION 5: PROCESS CONTROL

Standard 5-1	Admission Process
Standard 5-2	Registration and Students
Standard 5-3	Faculty Recruitment and Retention Process
Standard 5-4	Effective Teaching and Learning Process
Standard 5-5	Program Requirements Completion Process

Criterion 5: Process Control

Standard 5-1 Admission Process

a. Describe the program admission criteria at the institutional level, faculty or department if applicable.

BS Computer Science Degree

SZABIST offers a four years (eight semesters) BS (Computer Science) degree. The BSCS Program is essentially a day program and consists of 40 courses (five courses per semester) with a total of 130 credit hours (all electives and certain courses may be offered in the evening), Internship and the passing of the comprehensive exam. The maximum time limit to complete the BS degree is seven years.

b. Admission Process Flowchart[9]

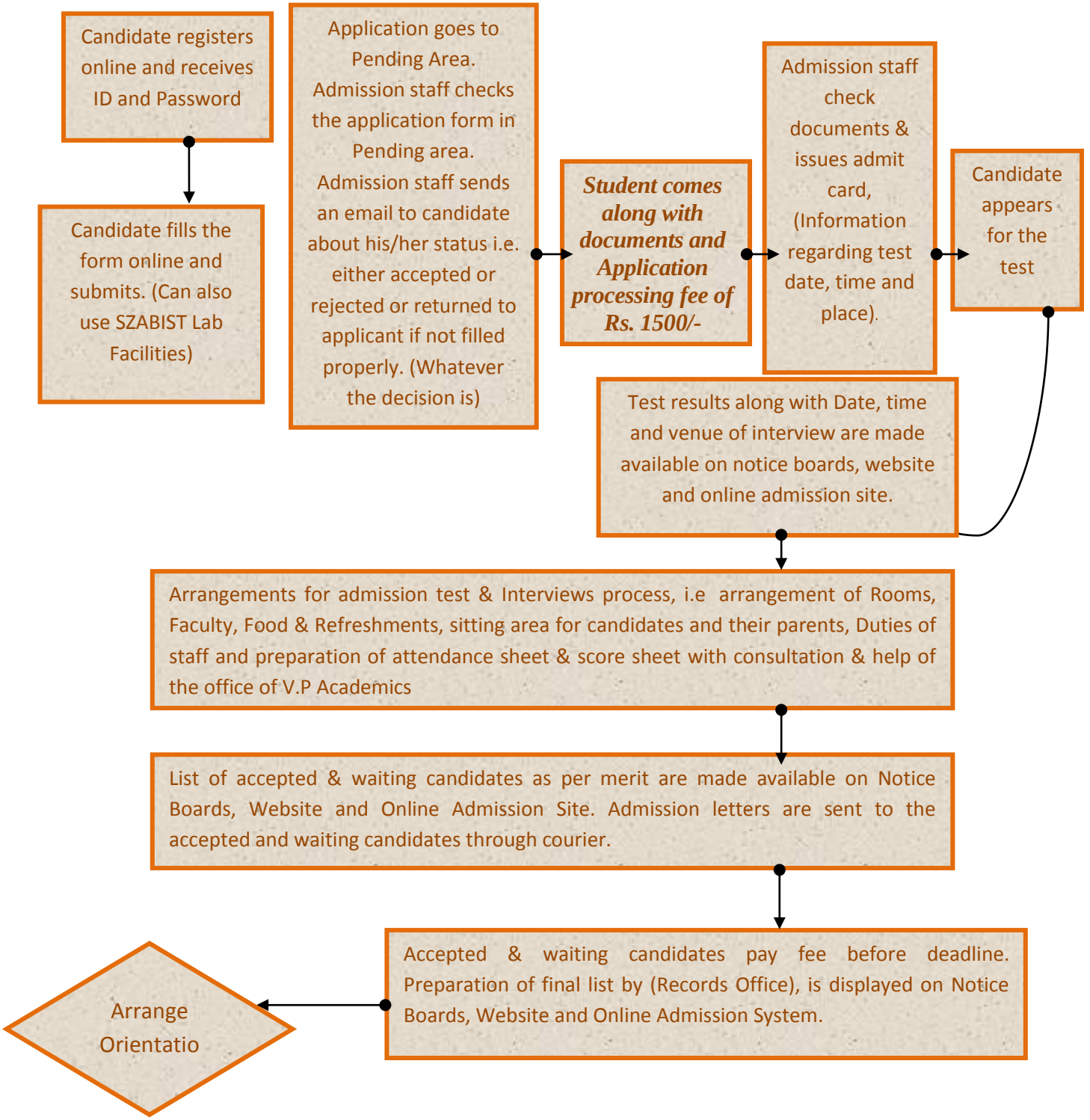

Figure 5.1

[9] Source: Admission department

SZABIST offers BS Computer Science admission on semiannual basis. Admission process will begin from October 15 to December 30 through different mediums, i.e SZABIST website www.szabist.edu.pk and advertisement in leading national newspapers seminars, workshops and ZabFm106.6 campus FM radio station the detail schedule of admission process is as below:

BS Computer Science Admission Schedule	
December, 26, 2015	Last date to submit application forms
December, 30, 2015	Admission test (Computer Based)
January, 01, 2015	Interviews
January, 24 , 2015	Orientation
January, 28, 2015	Classes begin for first semester

Table 5.1: BS Computer Science Admission Schedule

The whole admission process is computerized and there are checks at every stage to verify the results. The students apply online through www.admissions.szabist.edu.pk and they are assigned a login id and the same id is used to appear for online tests and check the results.

Results are announced within 10 days and candidates are informed of their admission status online.

The Admission process is evaluated each year before the Admission process starts and updated when required.

Admission Policy

All admissions in SZABIST are strictly based on merit. All candidates who have applied are required to qualify the admission test and appear for an interview/ 70% weightage is given to test and 30% weightage to interview performance. The interview panel comprises faculty members who score the candidates on their performance.

Different programs at SZABIST have different eligibility criteria which are clearly mentioned in the prospectus.

Results are announced within 10 days and candidates are informed of their admission status.

An admission test and group discussion is given to all applicants at SZABIST.

General paper in A Levels is not counted.

1650 SAT score is a test alternative for admission in undergraduate program.

Admission Requirements

Student must have completed A-Levels (with minimum 3 passes) / Intermediate (50% marks, including first year no supplementary) or equivalent from a recognized institution.

Candidates with mathematical background are preferred.

c. Describe policy regarding program/credit transfer[10]

Transfer Policy

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

Bachelor Course Transfer:

A maximum of up to 72 credits may be considered for transfer into BBA / BS/ BE programs.

SZABIST Inter-Campus Transfer:

For transfer candidate from other SZABIST campuses, the candidate must fulfill the admission requirements of the local campus he / she wish to transfer into. All courses / grades are transferable. A transfer fee will be applicable for students transferring from any other SZABIST campus.

Certificate Course Transfer:

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

d. Indicate how frequently the admission criteria are evaluated and if the evaluated results are used to improve the process[11]

Policies are reviewed annually.

Standard 5-2 Registration and Students

a. Describe how students are registered in the program

Registration Procedure

1. Complete view academic discipline should be followed at all times. Any member of the faculty is authorized to debar any student "off campus" for a day if in his/her the student has acted in an undisciplined manner, including use of foul image, abuse, shouting, etc.

[10] Source: Admission department
[11] Source: Admission department

2. Students are required to check the bulletin boards regularly, SZABIST website and ZabDesk announcements. Special and urgent announcements will be posted on the easel at the entrance to the Institute or in the library.
3. All students are required to keep the administration informed of any change in their home / office address, telephone numbers (cell, residence and office), and email from time to time. Student can also request for change profiles through ZabDesk.
4. All announcements will be posted on the bulletin board outside the Administration Office. Students should regularly check the board, SZABIST website and ZabDesk announcements for updates.
5. The following forms are available at the reception:
    1. Campus Transfer Form
    2. Certificate Student Registration Form
    3. Comprehensive Exam Registration Form
    4. Final Transcript & Pass Certificate Request Form
    5. Internship Evaluation Form
    6. Internship Reference Letter Request Form
    7. Internship Request Form
    8. Letter of Courses & Grade Form
    9. Multimedia Request Form
    10. Program Continuation Form
    11. Reference Letter Request Form
    12. Semester Withdrawal Form
    13. Software / Hardware Copyright Form
    14. Special Exam Request Form
    15. Special Facilities Request Form
    16. Student Identity Card Form
    17. Transfer Course Request Form
    18. Teaching Assistantship Form
6. Telephone and Photocopy facilities are available to the students at a very nominal cost.

7. Printing facilities are available through the laboratory at nominal cost. Requests for any special student activity should be made in writing to the administration and approval sought in advance.

b. Describe how students' academic progress is monitored and how their program of study is verified to adhere to the degree requirements

Students' academic progress is monitored regularly through ZabDesk. Faculty updates the ZabDesk by uploading the students' attendance and marks and their attendance and grades are monitored automatically through the online system.

After closing the semester and before the beginning of the new semester, the students' dismissal report is prepared.

c. Indicate how frequently the process of registration and monitoring are evaluated and if the evaluation results are used to improve the process

The Student Registration and Student Progress Monitoring processes are regularly reviewed in the ZABDESK through Program Managers

Academic Heads meeting, held once a month. Any necessary amendment in policy and resolving of individual cases is carried out at these meetings.

In the past one year, the course registration process has been improved. The speed and rate of timely registration by students has been made possible via stringent monitoring of registrations and maintaining strict deadlines and enforcing a hefty fine for late registration. Due to this improvement, class allocation is more accurate and records are updated well in time.

Standard 5-3 Faculty Recruitment and Retention Process

a. Describe the process used to ensure that highly qualified faculty is recruited to the program.

Description of Recruitment process

Human Resource department of SZABIST advertises the faculty positions every semester through leading newspapers and SZABIST website for applicants who wish to apply online. The HR department receives the CV's and files a copy. HR screens the applicants as per the requirements given in the ad. Further, they are shortlisted by the relevant VP Academics, HoD, program managers. Then calls are made for inviting shortlisted candidates for interview.

Next, a selection committee is organized to conduct the interview of shortlisted candidates and further shortlist the suitable candidates for a demo session. Unsuccessful applicants are informed

while the shortlisted candidates are called up for delivering a demo session. The selection panel evaluates the quality of lecture delivered. If the candidate is deemed successful, HR sends them an offer letter containing the terms of employment. If the offer is accepted, the person is officially added as a permanent faculty member and their documents are saved in Faculty Records.

b. Flowchart

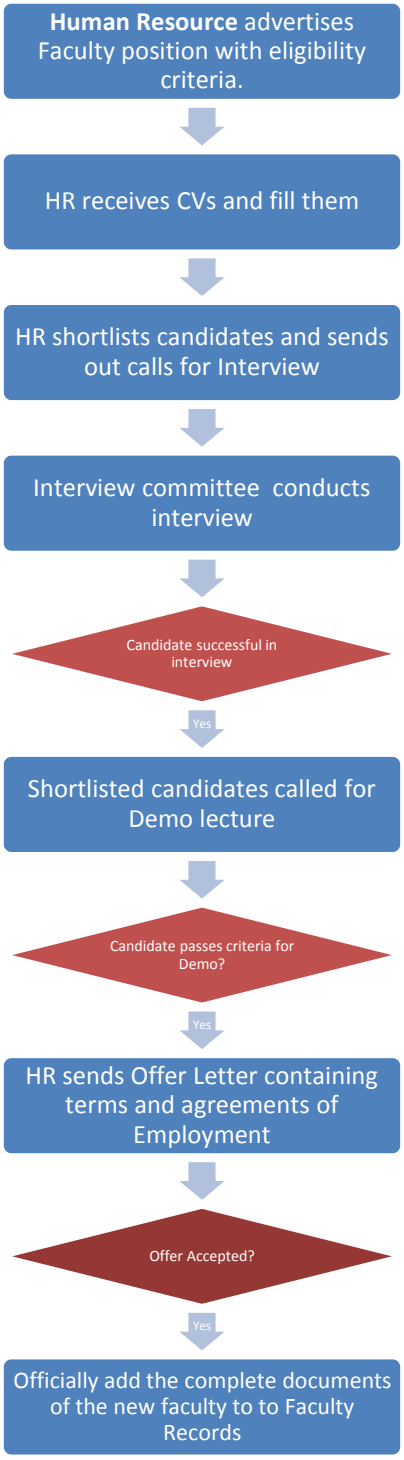

Figure 5.2

c. Indicate methods used to retain excellent faculty members

Retention Process

Full time faculty members are on probation for the first semester. At the end of this period, faculty members are evaluated by the Head of Department and Dean. On satisfactory evaluation, they are issued a confirmation letter by HR.

For confirmed faculty members, SZABIST offers a lot of incentives that help in retaining faculty members. Some of these benefits are car loan facilities, continuing education benefits, Provident fund, publication honorarium, thesis and dissertation major advisor / committee member honorarium.

d. Indicate how evaluation and promotion processes are in line with institution mission statement

Establishing a Promotion Opportunity

The promotion process will be initiated once a candidate attains eligibility subject to the availability of the positions in the candidates' respective departments/areas of specialization. For this purpose, all the positions need to be clearly defined and promotion criteria be identified in an unambiguous manner.

Job Grading and Eligibility Criteria

In the teaching cadre, the positions are: Lecturer, Assistant Professor, Associate Professor, and Professor. SZABIST largely adheres to the promotion criteria defined by the Higher Education Commission of Pakistan (HEC) for all its faculties. However, in case HEC guidance is unavailable, SZABIST will refer to the established best practices being followed by comparable institutes. Hence, promotions must at a minimum conform to the criteria established by the Higher Education Commission of Pakistan. Promotions on higher positions are made based on outstanding accomplishment and potential for distinction in the following four areas: Teaching and Advising, Research and Scholarship, Academic Service, and are further defined and weight given to each criterion is as follows:

HEC Criteria for the promotion of Higher grade position

The Higher Education Commission of Pakistan enumerates the following criteria for each faculty promotion in various ranks.

a. Qualification
b. Research: The publications in Journals with high impact factor will be preferred.
c. Length of service

Faculty of Computer Science

a. Lecturer to Assistant Professor

Option I

Degree requirement

The candidate for promotion is eligible if s/he has earned Master's degree (MS/MPhil) in Computer Science or allied field of studies from HEC recognized University/Institution.

Experience

At least two (2) years of teaching/research experience in an HEC recognized university/institution or an equivalent professional experience in the relevant field in a national or international organization.

Publications

No Publications are required.

Option II

Degree requirement

The candidate is eligible if s/he has earned a PhD degree awarded in Computer Science or allied field of studies from HEC recognized University.

Experience

No teaching experience is required for a candidate with PhD degree.

Publications

No publications are required.

b. Assistant Professor to Associate Professor

Academic Criteria

The candidate must have earned a PhD degree awarded in Computer Science or allied field of studies from HEC recognized University.

Experience

The candidate must have at least seven years of teaching/research experience in an HEC recognized University/Institution or equivalent professional experience in the relevant field.

Publications

The candidate must have 8 publications in an HEC/PEC recognized Journals.

c. Associate Professor to Professor

Academic Criteria

The candidate must have earned a PhD degree awarded in Computer Science or allied field of studies from HEC recognized University.

Experience

The candidate must have at least twelve years of teaching/research experience in an HEC recognized University/Institution or equivalent professional experience in a national or international organization.

Publications

The candidate must have 12 publications in an HEC recognized Journals.

	Designation	Options	Qualification	Experience	Publications
A	Lecturer to Assistant Professor	Option I	Master's (MS/MPhil) degree in relevant field from an HEC recognized University/ Institution.	2-years teaching/research experience in a recognized Institution/University/ College OR 2-years professional experience in the relevant field in a national Or International Organization.	Nil
		Option II	PhD in relevant field from HEC recognized University/Institution	No experience required	Nil
B	Assistant Professor to Associate Professor		PhD in the relevant field from institution recognized by HEC.	07-years teaching/research experience in a recognized institution/university or 7-years professional experience in the relevant field in a national or international organization out of which 2- years must be teaching experience.	8 research publications in HEC recognized Journals.

C	Associate Professor to Professor		Ph.D in the relevant field from an HEC recognized University/ Institution.	12-years teaching/research in HEC recognized University or post-graduate Institution or professional experience in the relevant field in a National or International organization.	12 research publications in an HEC recognized Journals

Table 5.2: HEC Criteria for the promotion

e. Indicate how frequently this process is evaluated and if the evaluation results are used to improve the process

These are an outcome of the annual joint meeting of Executive Committee and the Human Resource Department. The Evaluations begin at the end of March and the procedure is well-established for performance appraisals. Moreover, training of employees and appraisers is under considered by HR department. The faculty evaluations results are reviewed and the Executive Committee takes the final decision on promotions.

Standard 5-4 Effective teaching and learning Process

a. Describe the process and procedures used to ensure that teaching and delivery of course material is effective and focus on students learning

Effective Teaching

SZABIST has state-of-the-art class rooms with all the modern medium of teaching facilities. Like Computer, Multimedia, White board, Internet facility etc.

Faculty monitors and reacts to student questions, comments, body language, and facial expressions in an almost automatic fashion. This "automatic" information gathering and impression formation is a subconscious and implicit process. Teachers depend heavily on their impressions of student learning and make important judgments based on them, but they rarely make those informal assessments explicit or check them against the students' own impressions or ability to perform. Faculty routinely gathers potentially useful information on student learning through questions, quizzes, homework, and exams.

Classroom Assessment is based on seven assumptions:

1. The quality of student learning is directly, although not exclusively, related to the quality of teaching. Therefore, one of the most promising ways to improve learning is to improve teaching.

2. To improve their effectiveness, teachers need first to make their goals and objectives explicit and then to get specific, comprehensible feedback on the extent to which they are achieving those goals and objectives.
3. To improve their learning, students need to receive appropriate and focused feedback early and often; they also need to learn how to assess their own learning.
4. The type of assessment most likely to improve teaching and learning is that conducted by faculty to answer questions they themselves have formulated in response to issues or problems in their own teaching.
5. Systematic inquiry and intellectual challenge are powerful sources of motivation, growth, and renewal for college teachers, and Classroom Assessment can provide such challenge.
6. Classroom Assessment does not require specialized training; it can be carried out by dedicated teachers from all disciplines.
7. By collaborating with colleagues and actively involving students in Classroom Assessment efforts, faculty (and students) enhances learning and personal satisfaction.

Learning process

Classroom Assessment is an approach designed to help teachers find out what students are learning in the classroom and how well they are learning it. This approach has the following characteristics:

Learner-Centered

Classroom Assessment focuses the primary attention of teachers and students on observing and improving learning, rather than on observing and improving teaching. Classroom Assessment can provide information to guide teachers and students in making adjustments to improve learning.

Teacher-Directed

Classroom Assessment respects the autonomy, academic freedom, and professional judgment of college faculty. The individual teacher decides what to assess, how to assess, and how to respond to the information gained through the assessment. Also, the teacher is not obliged to share the result of Classroom Assessment with anyone outside the classroom.

Mutually Beneficial

Because it is focused on learning, Classroom Assessment requires the active participation of students. By cooperating in assessment, students reinforce their grasp of the course content and strengthen their own skills at self-assessment. Their motivation is increased when they realize that faculty are interested and invested in their success as learners. Faculty also sharpens their teaching focus by continually asking themselves three questions: "What are the essential skills

and knowledge I am trying to Teach?" "How can I find out whether students are learning them?" "How can I help students learn better?" As teachers work closely with students to answer these questions, they improve their teaching skills and gain new insights.

Formative

Classroom Assessment's purpose is to improve the quality of student learning, not to provide evidence for evaluating or grading students. The assessments are almost never graded and are almost always anonymous.

b. Indicate how frequently this process is evaluated and if the evaluation results are used to improve the process

Every semester in the 5th-6th week all the faculty members are evaluated by the students for their methods of teaching and delivery of course material. If a permanent faculty member scores less the 60% in the evaluation, the Program Mangers informs him/her about the scores and allots time for improvement. Whereas, if a visiting faculty scores less than 60% in the evaluation the Program Mangers informs the relevant faculty about the scores and allots time for improvement. After two weeks they are re-evaluated.

Standard 5-5 Program Requirements Completion Process[12]

a. Describe the procedure used to ensure that graduates meet the program requirements

Program Requirement

Record Office will make sure that the student has completed all core courses and all elective courses with minimum credits for the degree requirement.

When students apply for their final transcripts his/her all academic credential will be checked and verified through the ZabDesk by Program Manager or HoD. He approves the student record and sends it to Record Office department for issuing the transcript and degree.

Completion Process

Final transcript and degree will be dully signed by Program Manager, President and Chancellor.

SZABIST is arranging graduation ceremony every year to award the degree to their graduates, gold medals, special certificates and awards to position holders.

[12] Source of information is: Program Manager BSCS

b. Indicate how frequently this procedure is evaluated and if the evaluation results are used to improve the process

The quarterly Academic Heads meeting, the bi-annual Academic Council meeting and the bi-annual meeting of the newly formed Board of Studies, regularly discuss, evaluate the procedures that ensure completion of BSCS Degree program requirements. These discussions lead to improvements and amendments in the processes and procedures.

CRITERION 6: FACULTY

Standard 6-1	Program Faculty Qualifications and Number
Standard 6-2	Current Faculty, Scholarly Activities & Development
Standard 6-3	Faculty Motivation and Job Satisfaction

Criterion 6: Faculty

Standard 6-1 Program Faculty Organizations and Number

a. Faculty resumes in accordance with the format

Launched

b. Faculty distribution by program's areas[13]

Program area of specialization	Courses in the area and average number of sections per year	Number of faculty members in each area	Number of faculty with Ph.D. degree
Computer engineering & Information security	1 courses, 1 sections	Full Time: 1	0
Telecommunication & Networking	2 courses, 2 sections	Full Time: 1	0
Programming & Algorithms	6 courses, 3 sections	Full Time: 2	0
Core Computer Science & Software engineering		Full Time: 1	0
Physics & electronics	1 course, 1 section	Full Time: 1	0
Automation, control & Intelligent systems	1 course, 1 section	Full Time: 0	0
Mathematics	3 courses, 1 section	Full Time: 0	0
Management & Humanities	3 courses, 1 section	Full Time: 0	0

Table 6.1: Faculty distribution / program

Standard 6-2 Current Faculty Scholarly Activities and Development

a. Describe the criteria for faculty to be deemed current in the discipline and based on these criteria and information in the faculty member's resumes, what percentage of them is current. The criteria should be developed by the department.

The criteria for the faculty to be current:

1. Use current contents for teaching
2. Show involvement in the professional activities taking place in the campus
3. Participating in academic events like seminars / sessions
4. Participating in academic and industry conferences / workshops

[13] The source of information is HR Department.

5. Presenting and publishing papers in conferences
6. Publishing research papers in local and international journals
7. Publishing articles in newspapers and magazines
8. Conducting trainings and workshops
9. Supervising projects at bachelors level
10. Pursuing further education in their specialized field
11. Incorporating their research and otherwise learning into their teaching through content and methodology

b. Describe the means for ensuring that full time faculty members have sufficient time for scholarly and professional development.

SZABIST creates time and space for faculty to concentrate on priority faculty duties, to better integrate their competing faculty roles of teaching, scholarship, and service, and to achieve greater balance in their personal and professional lives. For professional development purposes, full time faculty members are eligible to enroll in Postgraduate programs free of charge.

c. Describe existing faculty development programs at the departmental and university level. Demonstrate their effectiveness in achieving faculty development.

For professional development purposes, full time faculty members are eligible to enroll in Postgraduate programs free of charge. Additionally, faculty members are encouraged to actively participate in research activities and publications through incentive of monetary rewards. At present, around 25% of full time faculty is enrolled in PhD program, that will be greatly benefit both the department and faculty, individually as through active research they are in continuous process of updating their skills to keep abreast of contemporary and future challenges.

d. Indicate how frequently faculty programs are evaluated and if the evaluation results are used for improvement.

Every month an academic heads meeting involving Deans/Head of Departments and Program Managers of all programs is held, this meeting is presided by Vice President (Academics). Additionally, monthly faculty meetings are scheduled between faculty, Program Manager and Head of Department to address any academic and administrative issues, thereby ensuring smooth running of the program. Furthermore, for each course faculty evaluation is

carried out using students' feedback and in light of this feedback Program Manager interacts with faculty to optimize student's learning experience.

Standard 6-3 Faculty Motivation & Job Satisfaction

a. Describe programs and processes in place for faculty motivation

1. Performance Merit Increment.
2. Performance Bonus.
3. Conference Sponsorship one per year for main author in a reputed conference nationally that is completely sponsored by SZABIST and one per two years internationally sponsored 50%.
4. Honoraria for writing articles and publish in reputed journals and magazines.
5. Study leave.
6. Continuing Education Facility.
7. Flexible working hours.

b. Indicate how effective these programs are.[14]

- Employees get the opportunity of personal and professional growth by acquiring education free of cost.
- The flexible timing enables the employees to manage their time on campus with the time of their classes.
- The performance based increments and annual bonuses motivate employees to work effectively and efficiently.

[14] Source of information: HR Officer

c. Obtain faculty input using faculty survey on programs for faculty motivation and job satisfaction

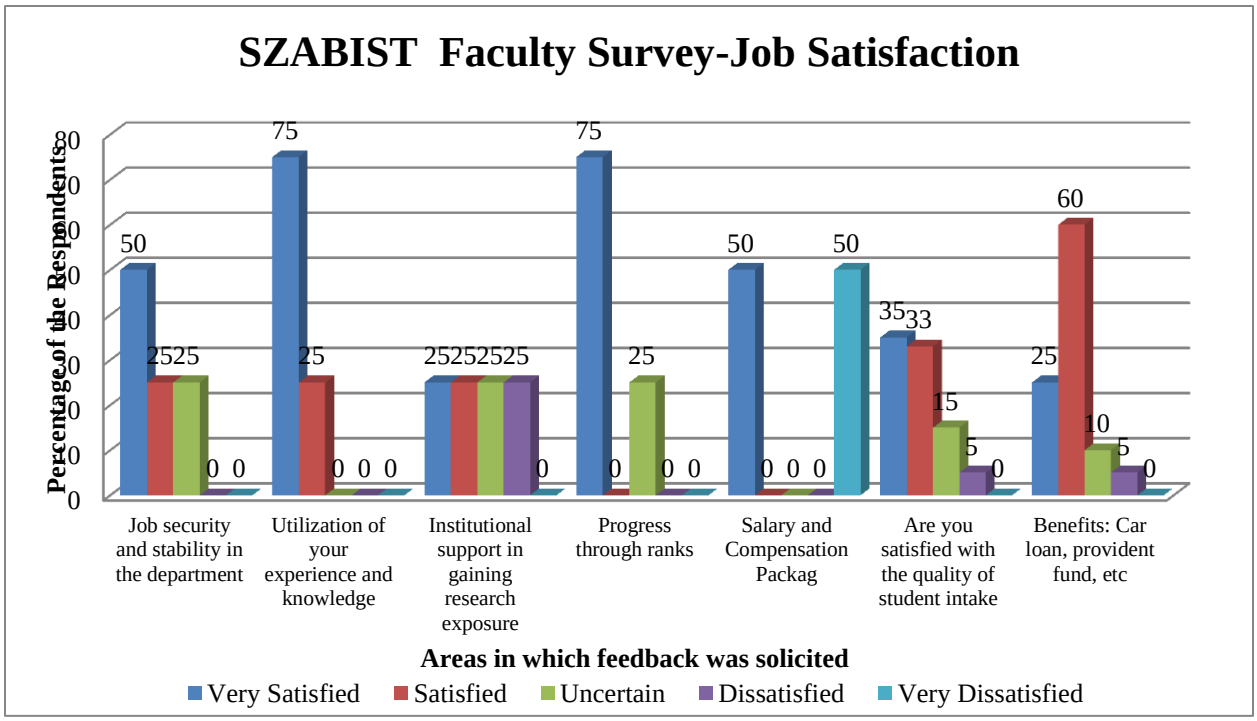

Figure 6.1

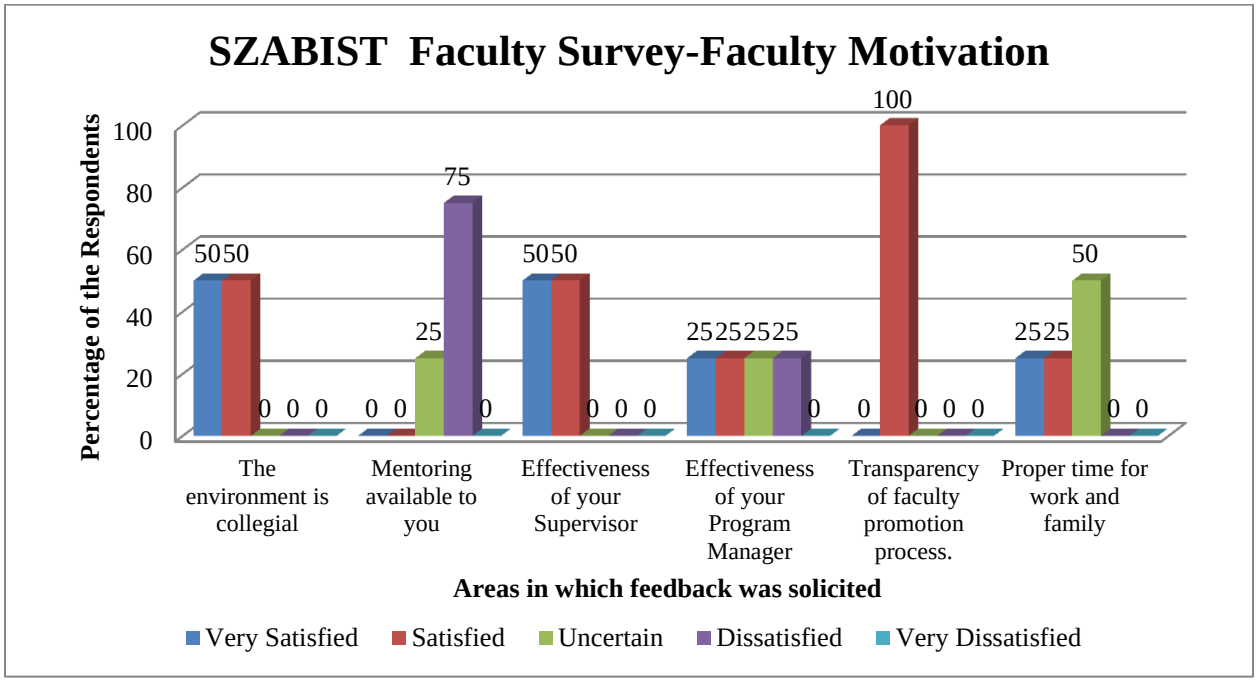

Figure 6.2

CRITERION 7: INSTITUTIONAL FACILITIES

Standard 7-1	New Trends in Learning (e.g. E-Learning)
Standard 7-2	Library Collections & Staff
Standard 7-3	Class-rooms & Offices Adequacy

Criterion 7: Institutional Facilities

Standard 7-1 New Trends of learning

a. Describe infrastructure and facilities that support new trends in learning

The following details the infrastructure that is in place to support the new trends in learning

No.	Particulars	Quantity
1	Servers	7
2	Desktop Computers	82
3	Video Conferencing Equipment	1
4	Multimedia Projectors	13
5	Local Area Network connecting above nodes, CISCO Small Business 300, CISCO 2950 series of switches, Laser Printers, Color Printers, Multimedia Equipment and a rich Software Library	

Table 7.1: Support Facilities

The above equipment in conjunction with different software's like TeamViewer, Skype, VNC etc. is used for conducting video conferences, online seminars, inter campus seminars and trainings etc. E-learning infrastructure is in place and is used as and when the need arises. Also, different seminars and conferences conducted by HEC are also accessible to students using the above infrastructure.

In addition to these there are a lot of digital resources offered thru digital library. For instance,

E-Library offers a wide variety of content across many subject areas, especially in business and social science. It acquires integrated collections of eBooks and other content. E-Library continues to add quality eBooks and other authoritative titles to their selection from the world's leading academic and professional publishers.

Emerald is a long established publisher with over 200 titles in the fields of management, information science and engineering. All of Emerald research journals are peer-reviewed to ensure the highest quality.

HEC has provided access to 4291 of the total journal titles. You can view by clicking @Journals Listing.

Content in JSTOR spans many disciplines, with over 500 high-quality publications available in the archive.

JSTOR provides the ability to retrieve high-resolution, scanned images of journal issues and pages as they were originally designed, printed, and illustrated.

Project MUSE provides online access to 430 full-text journals from 108 publishers in humanities and social science. MUSE pricing meets library needs around the world. Access URL: http://muse.jhu.edu

Springer is the world's second largest STM publisher, delivering high quality peer-reviewed journals through its acclaimed online service - SpringerLink. Through Springer Link, Springer publishes more than 1,250 journals online of which 1,030 are now available to Institutes within a range of PERI countries. Springer also offers optional pricing for the remaining (new and takeover journals in its programme).

Taylor & Francis has grown rapidly over the last two decades to become a leading international academic publisher. More than 1000 journal titles in a full range of disciplines.

Online database containing over 1,234 journals in science, technology, medicine, humanities and social sciences. WILEY-BLACKWELL JOURNALS

47 leading international medical Journals available through "Highwire Press", without any registration

b. Indicate how adequate the facilities are.

The above facilities are not exclusively used by BS Computer Science program but are shared by the campus. Having stated the above, they are sufficient for the BS Computer Science program.

Standard 7-2 Library Collection and Staff

a. Describe the adequacy of library's technical collection[15]

The total number of books available in the library to be used by Computer Science department for reference purposes is shown in the table below.

Library Resources			
No.	**Particulars**	**Quantity**	
1	Printed Form		
	Books	600	
	Computer Science		600
	Journal/ Magazines (Subscribed)	4	
	News Paper (Daily)	8	
2	Digital Form		
	CD's/DVD's (Book Related)	31	

[15] Source of information is: Library Assistant

	Access to Online Journals		
	Association of Computer Science Machinery		ALL

Table 7.2: Library Resources

b. Describe the support rendered by the library

Libraries are well furnished with necessary resources which include human and learning material.

At SZABIST Larkana, we have one library available at ground floor main building.

A total of 2 full time staff members are dedicated to provide continuous support to students and faculty on each working day in the library.

Standard 7-3 Class-rooms & Offices Adequacy

a. Describe the adequacy of the classrooms

Class rooms are well equipped with multimedia projector, PCs' with internet connections, sound system and Air Conditioners.

b. Describe the adequacy of faculty offices

Rooms are allocated for Permanent and visiting faculties where latest Intel Core to Duo/ Core i3 PCs are available with full internet facilities, landline extensions, Window/Split air conditioners, shelves display boards to display their objectives schedules and more over it is essential for all the faculty members to display their semester schedule on their doors for consulting of the students and faculty's availability.

CRITERION 8: INSTITUTIONAL SUPPORTS

Standard 8-1	Support and Financial Resources
Standard 8-2	Number and Quality of GSs, Students
Standard 8-3	Financial Support for Library and Computing Facilities

Criterion 8: Institutional Supports

Standard 8-1 Sufficient support and financial resources for faculties

a. Describe how your program meets this standard. If it does not explain the main causes and plans to rectify the situation

In SZABIST, permanent faculties are being hired on handsome salary packages, which include; basic salary, conveyance medical and house rent allowance.

On annual basis, around 10 percent on basic salary and performance increment of up to 5 percent is being added. After every year a performance bonus is being awarded to every employee.

After three years of successful teaching here in SZABIST, SZABIST will provide them vehicle loan.

And after six months of probation, for a permanent faculty, SZABIST offers Continuing Education Facility to pursue higher studies according to their needs without any payment but they have to sign a bond to serve the institution for five years after completion of their respective degree.

b. Describe the level of adequacy of secretarial support, technical staff and office equipment

There are 7 dedicated academic staff members who provide secretarial and technical support to the Computer Science department. The support includes:

- Class Management
- Attendance Sheet Circulation
- Time Table Maintenance
- Schedule Circulation

Rooms are allocated for permanent and visiting faculties where latest Intel Core to Duo PCs are available with full internet facilities, landline extensions, Split air conditioners, shelves display boards to display their objectives schedules and more over it is essential for all the faculty members to display their semester schedule on their doors for consulting of the students and faculty's availability.

Standard 8-2 Number and Quality of GSs, RAs and Ph.D students

a. Provide the number of graduate students, research assistants and Ph.D. students for the last three years

Not Applicable as First batch is yet to graduate

b. Provide the faculty: graduate student ratio for the last three years

Number of Faculty

Particulars	**Faculty**		
	2013	**2014**	**2015**
Total Number of Faculty	07	10	14
Full Time faculty	02	02	04
Adjunct Faculty	05	10	11

Table 8.1: Number of Faculty Members

Standard 8-3 Financial Support for Library, Laboratories and Computer Science Facilities[16]

Particulars	**Budgetary Allocation**		
	2012	**2013**	**2014**
Library	600000	600000	550000
Laboratories	3129442	1112500	768840
Computer Science Facilities	388860	454340	289300

Table 8.2: Financial Support

[16] Source of information is: HR, Financial and Academic Department

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SZABIST

SELF-ASSESSMENT REPORT

BS Computer Science (BSCS)

Larkana Campus

Program Self-Assessment Checklist

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

Guidelines for Program Team Report and QEC Review

Program: BS Computer Science (BSCS)

Larkana Campus

Prepared by QEC Staff:

Ms. Riffat Mughal

SHAHEED ZULFIKAR ALI BHUTTO
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PROGRAM SELF ASSESSMENT CHECKLIST

The following is a summary checklist of the main criteria and the associated standards that need to be addressed in the program self-assessment report.

CRITERIA AND ASSOCIATED STANDARDS		Yes/No	Issue/Observation	Possible Evidences
Criterion 1- Program Mission, Objectives, and Outcomes				
Standard 1-1	Program Measurable Objectives			
	a. Document institution, department, and program mission statements	✓		
	b. State program objectives	✓		
	c. State program outcomes	✓		
	d. Describe how each objective is aligned with program, college, and institution mission statements	✓		
	e. Outline the main elements of the strategic plan to achieve the program mission and objectives	✓		
	f. Table 4.1 program objectives assessment	✓		
	Please find sample of Table 4.1 attached in Annexure I (i-ii)			
Standard 1-2	Program Outcomes			
	a. Table 4.2 outcomes versus objectives **Please find example of Table 4.2 attached in Annexure II (iii)**	✓		
	b. Employer survey	N/A		
	c. Alumni survey	N/A		
	d. Graduating student's survey	N/A		
Standard 1-3	Assessment Results And Improvement Plans			
	a. Describe the action taken on based on the periodic assessments	✓		
	b. Describe major future program improvement plans based on recent assessments	✓		
	c. List strengths and weaknesses of the programs	✓		
	d. List significant future plans for the program	✓		

Standard 1- 4	Overall Performance Using Quantifiable Measures			
	a. Indicate the CGPA of successful students per semester, time required to complete the program, drop out ratio of students per semester (of the last 3 yrs) **Please find example attached in Annexure III (pg iv)**	✓		
	b. Indicate the percentage of employers that are strongly satisfied with the performance of the department's graduates. Use Employer's survey.	N/A		
	c. Percentage of Student Evaluation/Assessment results for all the courses and faculty. Use Teacher Evaluation Results.	✓		
	d. Percentage/List/Number of research activities i.e. journal publications, funded projects, conference publications per faculty and per year, and the faculty awarded excellence in research **Please find example attached in Annexure III (pg iv)**	✓		
	e. Number of short courses workshops, seminars organized on community service level **Please find example attached in Annexure III (pg iv)**	✓		
	f. Faculty and student surveys results to measure the administrative services provided	✓		
Criterion 2 – Curriculum Design And Organization				
	Courses detailed outline as in item E criterion 2 of the Self-Assessment Manual			
Standard 2-1	Courses Vs. Objectives			
	a. Title of Degree Program	✓		
	b. Definition of Credit Hour	✓		
	c. Degree Plan: Attach a flow chart showing pre-requisites, core, and elective courses. **Please find example attached in Annexure IV (pg v-ix)**	✓		
	d. Table 4.3 curriculum course requirement **Please find example attached in Annexure IV (pg v-ix)**	✓		
	e. Describe how the program content (courses) meets the program Objectives.	✓		

	f. Table 4.4 Courses versus Outcomes. List the courses and tick against relevant outcomes. **Please find example attached in Annexure IV(pg v-ix)**	✓		
Standard 2-2	Theory, Problem Analysis/ Solution and Design in Program			
	a. Table 4.5 Standard 2-2 requirements	✓		
Standard 2-3	Mathematics & Basic Sciences Requirements			
	a. Address standards 2-3, 2-4, and 2-5 using information required in Table 4.4	✓		
Standard 2-4	Major Requirements as Specified by Accreditation Body	✓		
Standard 2-5	Humanities. Social Sciences, Arts, Ethical. Professional & Other Requirements			
	a. List the courses required by the Accreditation Body.	✓		
Standard 2-6	Information Technology Content Integration Throughout the Program			
	a. List the courses required by the Accreditation Body.	✓		
	b. Describe how they are applied and integrated throughout the program	✓		
Standard 2-7	Communication Skills (Oral & Written)			
	a. List the courses required by the Accreditation Body.	✓		
	b. Describe how they are applied in the program.	✓		
Criterion 3 – Laboratories and Computing Facilities				
Standard 3- 1	Lab Manuals / Documentation / Instructions			
	a. Explain how students and faculty have adequate and timely access to the manuals/documentation and instructions	✓		
	b. Are the resources available sufficient for the program?	✓		
Standard 3- 2	Adequate Support Personnel for Labs			
	Indicate for each laboratory, support personnel, level of support, nature and extent of instructional support. **Please find example attached in Annexure V(pg x)**	✓		

Standard 3- 3	Adequate Computing Infrastructure and Facilities	✓		
	a. Describe how the computing facilities support the computing component of your program	✓		
	b. Are there any shortcomings in the computing infrastructure and facilities?	✓		
Criterion 4 – Student Support and Advising				
Standard 4-1	Sufficient Frequency of Course Offering			
	a. Provide the department's strategy for course offerings	✓		
	b. Explain how often core courses are offered.	✓		
	c. Explain how often elective courses are offered.	✓		
	d. Explain how required courses outside the department are managed to be offered in sufficient number and frequency	✓		
Standard 4-2	Effective Faculty / Student Interaction			
	Describe how you achieve effective student/faculty interaction in courses taught by one or more than one person; such as two faculty members, a faculty member, and a teaching assistant or a lecturer	✓		
Standard 4-3	Professional Advising and Counseling			
	a. Describe how students are informed about program requirements	✓		
	b. Describe the advising system and indicate how its effectiveness is measured	✓		
	c. Describe the student counseling system and how students get professional counseling when needed	✓		
	d. Indicate if students have access to professional counseling; when necessary	✓		
	e. Describe opportunities available for students to interact with practitioners, and to have membership in technical and professional societies	✓		
Criterion 5 – Process Control				
Standard 5-1	Admission Process			
	a. Describe the program admission criteria at the institutional level, faculty or department if applicable.	✓		

	b. Make a Flowchart **Please find example attached in Annexure VI (pg xi-xii)**	✓		
	c. Describe policy regarding program/credit transfer	✓		
	d. Indicate how frequently the admission criteria are evaluated and if the evaluated results are used to improve the process	✓		
Standard 5-2	Registration and Students			
	a. Describe how students are registered in the program	✓		
	b. Describe how students' academic progress is monitored and how their program of study is verified to adhere to the degree requirements	✓		
	c. Indicate how frequently the process of registration and monitoring are evaluated and if the evaluation results are used to improve the process	✓		
Standard 5-3	Faculty Recruitment and Retention Process			
	a. Describe the process used to ensure that highly qualified faculty is recruited to the program.	✓		
	b. Make a Flowchart **Please find example attached in Annexure VI (pg xi-xii)**	✓		
	c. Indicate methods used to retain excellent faculty members	✓		
	d. Indicate how evaluation and promotion processes are in line with institution mission statement	✓		
	e. Indicate how frequently this process is evaluated and if the evaluation results are used to improve the process	✓		
Standard 5-4	Effective Teaching and Learning Process			
	a. Describe the process and procedures used to ensure that teaching and delivery of course material is effective and focus on students learning	✓		
	b. Indicate how frequently this process is evaluated and if the evaluation results are used to improve the process	✓		
Standard 5-5	Program Requirements Completion Process			
	a. Describe the procedure used to ensure	✓		

	that graduates meet the program requirements			
	b. Describe when this procedure is evaluated and whether the results of this evaluation are used to improve the process	✓		
Criterion 6 – Faculty				
Standard 6-1	Program Faculty Qualifications and Number			
	a. Faculty resumes in accordance with the format	Launched		
	b. Table 4.6 faculty distribution by program's areas **Please find example attached in Annexure VII (pg xiii)**	✓		
Standard 6-2	Current Faculty, Scholarly Activities & Development			
	a. Describe the criteria for faculty to be deemed current (updated in the field) in the discipline and based on these criteria and information in the faculty member's resumes, what percentage of them is current. The criteria should be developed by the department	✓		
	b. Describe the means for ensuring that full time faculty members have sufficient time for scholarly and professional development	✓		
	c. Describe existing faculty development programs at the departmental and university level. Demonstrate their effectiveness in achieving faculty development	✓		
	d. Indicate how frequently faculty programs are evaluated and if the evaluation results are used for improvement	✓		
Standard 6-3	Faculty Motivation and Job Satisfaction			
	a. Describe programs and processes in place for faculty motivation	✓		
	b. Indicate how effective these programs are	✓		
	c. Obtain faculty input using faculty survey (Appendix C) on programs for faculty motivation and job satisfaction	✓		

Criterion 7 – Institutional Facilities				
Standard 7-1	New Trends in Learning (e.g. E-Learning)			
	a. Describe infrastructure and facilities that support new trends in learning	✓		
	b. Indicate how adequate the facilities are	✓		
Standard 7-2	Library Collections & Staff			
	a. Describe the adequacy of library's technical collection	✓		
	b. Describe the support rendered by the library	✓		
Standard 7-3	Class-rooms & Offices Adequacy			
	a. Describe the adequacy of the classrooms	✓		
	b. Describe the adequacy of faculty offices	✓		
	Please find examples of Criterion 7 attached in Annexure VIII (pg xiv-xvi)			
Criterion 8 – Institutional Support				
Standard 8-1	Support and Financial Resources			
	a. Describe how your program meets this standard. If it does not explain the main causes and plans to rectify the situation	✓		
	b. Describe the level of adequacy of secretarial support, technical staff and office equipment	✓		
Standard 8-2	Number and Quality of GSs, RAs and Ph.D. Students			
	a. Provide the number of graduate students, research assistants and Ph.D. students for the last three years	✓		
	b. Provide the faculty: graduate student ratio for the last three years	✓		
Standard 8-3	Financial Support for Library and Computing Facilities			
	a. Describe the resources available for the library	✓		
	b. Describe the resources available for laboratories	✓		
	c. Describe the resources available for computing facilities	✓		
	Please find examples of Criterion 8 attached in Annexure IX (pg xvii-xix)			

***Key**

✓ - Yes X- No NA- Not Applicable

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INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

SELF-ASSESSMENT REPORT

BS Computer Science (BSCS)

Larkana Campus

Assessment Team Report

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

ASSESSMENT TEAM REPORT

BS Computer Science (BSCS)

Larkana Campus

Spring 2015

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

Assessment Team Report

The AT report is comprised of the following:

A. Review Report
B. Assessment Results Implementation Plan Summary
C. Criteria Referenced (Rubric) Evaluation of SAR

A. The Review Report

1. Names of Assessment Team Members

i. Dr Imran Khan Junejo
ii. Mr. Ahsan Ali Kumbhar
iii. Ms. Rabail Gul

2. Date of Nomination

7th August 2015

3. Assessment duration (e.g. 7 days or 10 days)

06 Days (31st August 2015- 5th September 2015)

4. Name of Department and Program being assessed

Department of Computer Sciences and BSCS (Bachelor of Computer Science) Program

5. Shortcomings of the PT report

F (IV). No Tool Mentioned to measure the Objective
1-3(d). Future Plan Should be revised.
1-4(d) Mostly Listed Publications are before joining SZABIST
1-4(e) Reasons for not conducting Survey
4-3. Job Placement, Alumni Survey, Graduate Directory(Not Applicable as no batch Graduate)
6-3. Reason for not conducting Survey
7-1. 3-2,3 (a), Number of Pcs, Not Matching

6. Comments on:

i. Relevance and the comprehensiveness of the responses to criteria / standards given in the SA Manual

Standards are meeting, but some shortcomings are rectified.

ii. Authenticity of the information / data provided in the report

Resources are attached and physical survey has been conducted by AT Team Members.

iii. Adequacy of the summaries / conclusions drawn by PT on the basis of various feedbacks / surveys

No any survey has conducted.

iv. Observations made during the assessment

1. Faculty Follows Time Table as well as Policies.
2. Mostly Objectives are met.
3. Physics Lab is under development, but the apparatus of physics lab temporarily use at other space.

v. Strengths and weaknesses of the Program

Strength: Faculty and Facilities

Weakness: Practical Exposure Should be…

7. Date of the presentation of AT report in the exit meeting

July 25th, 2016

B. Criteria Referenced (Rubric) Evaluation of SAR

CRITERIA REFERENCED SELF ASSESSMENT – METHODOLOGY AND EVALUATION TOOL

Scoring of Criterion Items

1. Key areas of each criterion are to be scored normally by considering the approach taken by the university and the results achieved. Maximum score for each items is 5 and the minimum is 1. The visiting team is required to award the score by encircling one of the entries against each item. The total of the encircled values (TV) for each criterion will be determined and normalized in percentages. Each criterion has a weight allocated to it. Scores pertaining to a particular criterion will be the product of TV and its weightage. Following are the guidelines to be used to awarding score to each key area.

Result	**Score**
Poor performance in most of the areas.	1
Fair performance in most of the areas.	2
Good performance for most areas. No poor performance in any areas.	3
Good to excellent performance in all areas.	4
Excellent performance in most of the areas.	5

Criteria Referenced Self-Assessment – Methodology and Evaluation Tool

Criterion 1 – Program Mission, Objectives and Outcomes		**Weight = 0.05**				
Factors		**Score**				
1	Does the Program have documented measureable objectives that support faculty / college and institution mission statements?	5	4	3	2	1
2	Does the Program have documented outcomes for graduating students?	5	4	3	2	1
3	Do these outcomes support the Program objectives?	5	4	3	2	1
4	Are the graduating students capable of performing these outcomes?	N/A				
5	Does the department assess its overall performance periodically using quantifiable measures?	5	4	3	2	1
6	Is the result of the Program Assessment documented?	5	4	3	2	1
	Total Encircled Value (TV)	**20**				
Score 1 **(S1) = [TV/(No. of Questions *5)] *100 *Weight**		**3.33**				
Criterion 2 – Curriculum Design and Organization		**Weight = 0.20**				
Factors		**Score**				
1	Is the curriculum consistent?	5	4	3	2	1
2	Does the department assess its overall performance periodically using quantifiable	5	4	3	2	1
3	Are theoretical background, problem analysis and solution design stressed within the program's core material?	5	4	3	2	1
4	Does the curriculum satisfy the core requirements laid down by respective accreditation bodies?	5	4	3	2	1
5	Does the curriculum satisfy the major requirements laid down by HEC and the respective councils / accreditation bodies?	5	4	3	2	1
6	Does the curriculum satisfy the professional requirements as laid down by Accreditation Body?	5	4	3	2	1
7	Is the information technology component integrated throughout the program?	5	4	3	2	1
8	Are oral and written skills of the students developed and applied in the program?	5	4	3	2	1
	Total Encircled Value (TV)	**37**				
Score 2 **(S2) = [TV/(No. of Questions *5)] *100 *Weight**		**18.5**				

Criterion 3 – Laboratories and Computing Facilities		**Weight = 0.10**				
Factors		**Score**				
1	Are laboratory manuals / documentation / instructions etc. for experiments available and readily accessible to faculty and students?	5	4	3	2	1
2	Are there adequate number of support personnel for instruction and maintaining the laboratories?	5	4	3	2	1
3	Are the university's infrastructure and facilities adequate to support the program objectives?	5	4	3	2	1
	Total Encircled Value (TV)	**15**				
	Score 3 **(S3) = [TV/(No. of Questions *5)] *100 *Weight**	**10**				

Criterion 4 – Student Support and Advising		**Weight = 0.10**				
Factors		**Score**				
1	Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	5	4	3	2	1
2	Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	5	4	3	2	1
3	Does the university provide academic advising on course decisions and career choices to all students?	5	4	3	2	1
	Total Encircled Value (TV)	**13**				
	Score 4 **(S4) = [TV/(No. of Questions *5)] *100 *Weight**	**8.67**				

Criterion 5 – Process Control		**Weight = 0.15**				
Factors		**Score**				
1	Is the process to enroll students to a program based on quantitative and qualitative criteria?	5	4	3	2	1
2	Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1
3	Is the process to register students in the program and monitoring their progress documented?	5	4	3	2	1
4	Is the process above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1
5	Is the process to recruit and retain faculty in place and documented?	5	4	3	2	1
6	Are the processes for faculty evaluation & promotion consistent with the institution mission?	5	4	3	2	1
7	Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	5	4	3	2	1

8	Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	5	4	3	2	1
9	Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1
10	Is the process to ensure that graduates have completed the requirements of the program base on standards and documented procedures?	5	4	3	2	1
11	Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1
	Total Encircled Value (TV)	**47**				
	Score 5 **(S5) = [TV/(No. of Questions *5)] *100 *Weight**	**12.81**				
Criterion 6 – Faculty		**Weight = 0.15**				
Factors		**Score**				
1	Are there enough full time faculty members to provide adequate coverage of the program areas / courses with continuity and stability?	5	4	3	2	1
2	Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula?	5	4	3	2	1
3	Do the faculty members posses a level of competence that would be obtained through graduate work in the discipline?	5	4	3	2	1
4	Do the majority of faculty members hold a PhD degree in their discipline?	5	4	3	2	1
5	Do faculty members dedicate sufficient time to research to remain current in their disciplines?	5	4	3	2	1
6	Are there mechanisms in place for faculty development?	5	4	3	2	1
7	Are faculty members motivated and satisfied so as to excel in their profession?	5	4	3	2	1
	Total Encircled Value (TV)	**25**				
	Score 6 **(S6) = [TV/(No. of Questions *5)] *100 *Weight**	**10.71**				

Criterion 7 – Institutional Facilities							Weight = 0.15
Factors							**Score**
1	Does the institution have the infrastructure to support new trends such as e-learning?	5	4	3	2	1	
2	Does the library contain technical collection relevant to the program and is it adequately staffed?	5	4	3	2	1	
3	Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?	5	4	3	2	1	
	Total Encircled Value (TV)						**13**
	Score 7 **(S7) = [TV/(No. of Questions *5)] *100 *Weight**						**13**

Criterion 8 – Institutional Support							Weight = 0.15
Factors							**Score**
1	Is there sufficient support and finances to attract and retain high quality faculty?	5	4	3	2	1	
2	Are there an adequate number of high quality graduate students, teaching assistants and PhD students?	N/A					
	Total Encircled Value (TV)						**4**
	Score 8 **(S8) = [TV/(No. of Questions *5)] *100 *Weight**						**6**

OVERALL ASSESSMENT SCORE = S1 + S2 + S3 + S4 + S5 + S6 + S7 + S8 + S9 + S10

= 83.03

C. Assessment Results Implementation Plan Summary BSCS-Larkana Campus

AT Findings	Corrective Action	Implementation Date	Responsible Body	Resources Needed
1.Less Participation in I.T Exhibitions, No Job Satisfaction	1. Give Exposure at Domestic & National level. Increase level of job satisfaction.	August 2017	Head of Campus and Computer Science Department	-
2.No Tool For Ethical Professional Grooming	2. Character building Course Seminar, Training.	Will be implement	Campus Management	-
3.Repetitive things in PT Report	3. It should be Specific	Will be implement	Campus Management	-

President's Comments: It is highly recommended that the concerned authorities ensure the implementation of the identified corrective actions. The smooth implementation will augment the quality and standards of the BSCS program at SZABIST Larkana Campus. I appreciate the efforts rendered by the Program Team, Assessment Team and QEC staff for the preparation and completion of the Self-Assessment Report of BSCS program.

Name and Signature:

Madame Shahnaz Wazir Ali

Dean's or HoD's Comments: The suggestions given in AT findings will be implemented as soon as possible. For example: Faculty promotion policy is almost the same as given by the HEC. However, it is in final stage and open to everyone soon. As far as the Faculty hiring is concerned, it is an ongoing process. We are trying to get more qualified Faculty. In this regard we advertise at least twice a year to get more qualified Faculty. Other suggestions will be implemented in Phases and as soon as physical resumes and budgetary allocation is available.

Name and Signature:

Mr. Muhammad Bux Soomro

QEC Comments: The initiation and completion of the Self-Assessment process of BSCS program was a significant task, as the assessment highlighted areas of the program that require improvements. The IR/QEC staff is confident that the implementation of the corrective actions will amplify the market standing of the program and students' overall educational experience. The SAR reached its completion with the support of the Head of the Department, Program Managers, the efforts of the Program Team, Assessment Team and the commitment of the IR/QEC staff.

Name and Signature:

Ms. Faryal Shahabuddin

Ms. Sadaf Sheikh

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

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Name and Signature:

Ms. Faryal Shahabuddin

Ms. Sadaf Sheikh

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

SELF-ASSESSMENT REPORT

BS Computer Science (BSCS)

Larkana Campus

Program Team Registration Forms

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Program Team

Program Team of (Name of Department / Faculty): Computer Science (BSCS)

Team Leader: M B Soomro

Name: M. B Soomro

Position: Program Mangger (BSCS)

Institution: SZABIST Larkana

Contact No: (Office) 074-4053400-3

Mobile No: 0300 3431144

Email Address: mbsoomro@Lrk.szabist.edu.pk

Role in Program Team:

Beside his / her own responsibilities, he/ she will also be responsible for the following:

- To attend the SAR meetings as and when required.
- To ensure that Self Assessment Mechanism is being implemented as per the given guidelines.
- To prepare drafts of the SAR on the given dead line and send them to QEC for timely feedback.
- To keep the record of all the supporting documents addressing various standards of the SAR.
- To circulate all the applicable feedback forms to the target stakeholders and include the analysis of the same in the SAR.
- To communicate with the management on the effectiveness and suitability of the Self Assessment Mechanism.

Declaration of the Program Team Member:

I am quite willing to be part of this team and assure that I would do my best to play my role in the working of Program Team.

(Signature of PT Member)

11/5/2015

Date

Approved By: _____

(Head of the Department)

Note: Completed form should be sent to the QEC

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Program Team

Program Team of (Name of Department / Faculty): BSCS Faculty

Team Leader: Mr. M.B Soomro

Name: Murtaza Ahmed Siddiqi Position: Lecturer

Institution: SZABIST Larkana Campus Contact No: (Office) (074) 4053400 - 112

Mobile No: 0300-2826912 Email Address: murtazasiddiqi@lrk.szabist.edu.pk

Role in Program Team:

Beside his / her own responsibilities, he/ she will also be responsible for the following:

- To attend the SAR meetings as and when required.
- To ensure that Self Assessment Mechanism is being implemented as per the given guidelines.
- To prepare drafts of the SAR on the given dead line and send them to QEC for timely feedback.
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- To communicate with the management on the effectiveness and suitability of the Self Assessment Mechanism.

Declaration of the Program Team Member:

I am quite willing to be part of this team and assure that I would do my best to play my role in the working of Program Team.

(Signature of PT Member) 11 - 05 - 2015 Date

Approved By: _____

(Head of the Department)

Note: Completed form should be sent to the QEC

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Program Team

Program Team of (Name of Department / Faculty): Computer Science (BS CS)

Team Leader: Ms. Ambreen Samoo

Name: Sasmad Samoo

Position: Assistant Professor.

Institution: SZABIST, Karachi.

Contact No: (Office) _____

Mobile No: 0310-7774546

Email Address: Sasmad@khi.szabist.edu.pk

Role in Program Team:

Beside his / her own responsibilities, he/ she will also be responsible for the following:

- To attend the SAR meetings as and when required.
- To ensure that Self Assessment Mechanism is being implemented as per the given guidelines.
- To prepare drafts of the SAR on the given dead line and send them to QEC for timely feedback.
- To keep the record of all the supporting documents addressing various standards of the SAR.
- To circulate all the applicable feedback forms to the target stakeholders and include the analysis of the same in the SAR.
- To communicate with the management on the effectiveness and suitability of the Self Assessment Mechanism.

Declaration of the Program Team Member:

I am quite willing to be part of this team and assure that I would do my best to play my role in the working of Program Team.

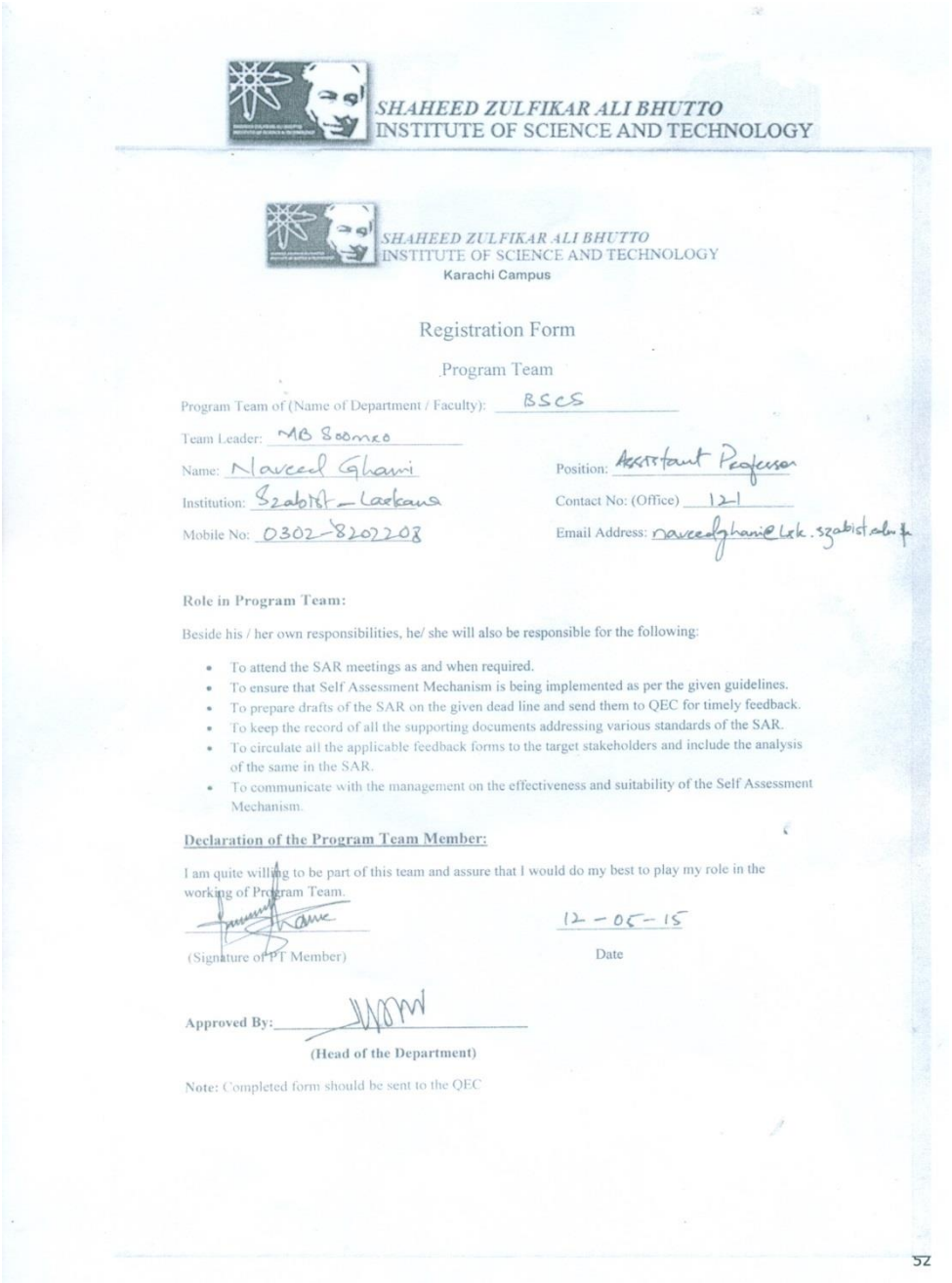
(Signature of PT Member)

8-05-2015
Date

Approved By: _____

(Head of the Department)

Note: Completed form should be sent to the QEC



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INSTITUTE OF SCIENCE AND TECHNOLOGY

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Program Team

Program Team of (Name of Department / Faculty): BSCS

Team Leader: MB Soomro

Name: Naveed Ghani Position: Assistant Professor

Institution: Szabist - Larkana Contact No: (Office) 121

Mobile No: 0302-8202208 Email Address: naveed.ghani@lrk.szabist.edu.pk

Role in Program Team:

Beside his / her own responsibilities, he/ she will also be responsible for the following:

- To attend the SAR meetings as and when required.
- To ensure that Self Assessment Mechanism is being implemented as per the given guidelines.
- To prepare drafts of the SAR on the given dead line and send them to QEC for timely feedback.
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- To circulate all the applicable feedback forms to the target stakeholders and include the analysis of the same in the SAR.
- To communicate with the management on the effectiveness and suitability of the Self Assessment Mechanism.

Declaration of the Program Team Member:

I am quite willing to be part of this team and assure that I would do my best to play my role in the working of Program Team.

(Signature of PT Member) 12-05-15 Date

Approved By:

(Head of the Department)

Note: Completed form should be sent to the QEC

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SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

SELF-ASSESSMENT REPORT

BS Computer Science (BSCS)

Larkana Campus

Assessment Team Registration Forms

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Assessment Team

Assessment Team of (Name of Department / Faculty): BSCS

Team Leader: Mr. Ahsan kumbhar

Name: Ahsan Ali

Position: Faculty Member

Institution: SZABIST-LARKANA

Contact No: (Office) 074-4053400 - 109

Mobile No: 0331-3447779

Email Address: ahsan@lrk.szabist.edu.pk

Role in Assessment Team:

- Beside his / her own responsibilities, He/ She will also be responsible for the following:
- The review of SAR
- Physical Verification of the academic facilities
- Verification of the contents of SAR
- Evidence gathering to support their findings
- Evaluation of SAR in light of the above points
- Reporting on the findings of the evaluation and visits
- Converting the report in the HEC-specified rubric format

Declaration of the Assessment Team Member:

I am quite willing to be part of this team and assure that I would do my best to play my role in the working of Assessment Team.

(Signature of AT Member)

10-8-2015
Date

Approved By: 17/8/15

(Head of the QEC)

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Assessment Team

Assessment Team of (Name of Department / Faculty): BSCS

Team Leader: Ms. Ahsan Kumbhar

Name: Imran Khan Junejo

Position: Lecturer

Institution: SZABIST Lrk

Contact No: (Office) 074-4053400 Ext. 128

Mobile No: -

Email Address: junejo@lrk.SZABIST.edu.pk

Role in Assessment Team:

- Beside his / her own responsibilities, He/ She will also be responsible for the following:
- The review of SAR
- Physical Verification of the academic facilities
- Verification of the contents of SAR
- Evidence gathering to support their findings
- Evaluation of SAR in light of the above points
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- Converting the report in the HEC-specified rubric format

Declaration of the Assessment Team Member:

I am quite willing to be part of this team and assure that I would do my best to play my role in the working of Assessment Team.

(Signature of AT Member)

10th August 2015
Date

Approved By: Jawad 17/8/15

(Head of the QEC)

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Karachi Campus

Registration Form

Assessment Team

Assessment Team of (Name of Department / Faculty): BSCS

Team Leader: Ahsan Kumbhar

Name: Rabail

Position: Faculty Management Sciences.

Institution: SZABIST

Contact No: (Office) 074-4053400-120

Mobile No: 0334-2438551

Email Address: rabail.jamali@khi.szabist.edu.pk

Role in Assessment Team:

- Beside his / her own responsibilities, He/ She will also be responsible for the following:
- The review of SAR
- Physical Verification of the academic facilities
- Verification of the contents of SAR
- Evidence gathering to support their findings
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(Signature of AT Member)

10th August 2015
Date

Approved By: Jawad 17/8/15
(Head of the QEC)