SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

SZABIST

Hyderabad Campus

SELF-ASSESSMENT REPORT

BS Computer Science

Spring 2015

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY

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Self-Assessment Report

Executive Summary

Bachelors in Computer Science (BSCS)

Introduction

The Quality Enhancement Cell (QEC), since its inception, has been actively promoting its core function of bringing standardization to SZABIST's academic programs in line with the guidelines enunciated by the Higher Education Commission (HEC). In this regard, a number of workshops were conducted by QEC staff to create awareness of the Self-Assessment Report (SAR) process and to emphasize the significance of further improving the quality of education.

QEC initiated the SAR process in programs offered in Management Sciences Department, and Computer science Department. Currently these programs are in the advance stages of completion.

In spring 2015, QEC initiated the SAR of Bachelors in Computer Science (BSCS). The highlights of the process were as follows:

1. Nomination of Program Team (PT)

The PT was nominated by the Head of campus, Mr. Jawad Raza Khoso on March 6th 2015. Following were the members of the PT:

(i) Mr. Sunny Kumar (Team Leader)
(ii) Mr. Umair Jamil
(iii) Mr. Ahsan Memon

2. Submission of PT Report

The PT submitted the first draft of the report on April 23rd 2015. The QEC examined the report, identified shortcomings and communicated to the PT. After incorporating the changes suggested by QEC the report was finalized on May 9th, 2015.

3. Nomination of Assessment Team (AT)

The AT was nominated by the Head of QEC, Ms. Faryal Shahabuddin on May 11th, 2015. Following were the members of the AT:

(i) Dr. Amir Hassan (Team Leader)
(ii) Ms. Sumbul Gulamani
(iii) Mr. Saira Muzaffar

4. Date of Submission of AT Report

The AT Report was submitted on May 28th, 2015.

5. AT Findings and Recommendations

Following are the recommendations provided by the AT to overcome the major shortcomings of the program:

(i) It is recommended that there should be more emphasis on faculty to have publications i.e. at least 1 publication every 6 months per faculty
(ii) It is recommended that there should be a dedicated research lab equipped with upgraded hardware and software
(iii) It is recommended that Workshop could be organized in order to give faculty members exposure to the new teaching trends
(iv) It is recommended that FDPs can be organized in collaboration with HEC
(v) Basic courses are needed for the students at initial stage, that can enhance their capabilities to meet the needs of core courses

6. Preparation of Assessment Results Implementation Plan Summary

The Assessment Results Implementation Plan Summary was prepared by the AT. The Plan identified the shortcomings of the program, and recommended remedial measures. The head of campus plans to take corrective measures in the near future to strengthen the program and improve the quality of education delivered at SZABIST.

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BS Computer Sciences

Program Team Report

Spring 2015

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Nineteen years teaching and research experience in the University of Sind Jamshoro. Eighteen years practical/field experience of working on the Automation Projects of Information Systems of the State Bank of Pakistan (The Central Bank). The service activity of this job was focused on the computer-based training to the officers of the Bank and research and development programs towards the automation of the Central Bank. After my retirement from SBP in 2010, I also worked as a site Manager DRS Data Center of SBP on contract basis from 2010 to 2012. Presently, I am working as a Professor in Computer Science in SZABIST Hyderabad. 92

Nineteen years teaching and research experience in the field of Communication and Computer Technology, which includes six years research experience in the field of Telecommunication Engineering at the Strathclyde University, Glasgow, Scotland United Kingdom. 92

5. "PHYSICAL LAYER PROTOCOL FOR FACTORY AUTOMATION" 93

6. "OPTIMAL CONTROL MODEL IN VIEW OF VARIOUS QUEUE DISCIPLINES" MUET Research Journal of Engineering & Technology, Jamshoro, Pakistan, July 1994. 93

8. "To Study the Radio Communication System of the Radio Pakistan, Hyderabad, Pakistan. Baluchistan University Research Journal, Quetta, Pakistan, vol. 1, 1999 93

- I wrote my PhD thesis under the title of "Some Overload Control Models for Processor Controlled Systems". I got experience on many Main, Mini and Microcomputers such as ICL-1904S, Honeywell, IBM 360/370 and VAX/VMS Machines in a fully networked environmnt. 94

- I also acquired a wide knowledge of "BASIC", "ALGOL 60" and "FORTRAN" languages, and know-how of many computer software packages such as "Elliot Simulation Package"

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

a. Mission Statements

Mission Statement of Shaheed Zulfikar Ali Bhutto Institute of Science & 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; 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.

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.

Mission Statement of BS Computing 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.

Program Objectives

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

b. Program Objectives of BS Computer Sciences

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. How each Objective is aligned with Program & Institution Mission Statements

Objective	Alignment with program and institution mission statement
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.

Effectively design and construct software applications.	Practical skills of the discipline through class room teaching, laboratory sessions, research workshops, seminars 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.

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

Our academic strategic plan is based on our mission to be a student-centered department that prepares broadly educated, technologically proficient and highly productive citizens.

1. **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.

2. **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.

3. **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 and internship-based learning opportunities), by providing training for undergraduate students in research methodology and responsible research conduct, and by involving undergraduate students in multi-disciplinary research carried out at SZABIST, such as Renewable Energy, Stem cell, Remote distance learning etc. to name a few. SZABIST also aid student research by providing student travel grants to present their work at conferences and creating a campus-based student research journal.

4. **Professional Career building:** Efforts are being made to establish an Executive Development Center (EDC) but currently designated staff facilitates arranging Internships for all students and acts as a liaison between the industry and the students. Every semester, renowned national and multinational companies contact the campus to conduct their employment tests, interviews and other on-campus recruitment activities to directly induct SZABIST graduates into their organizations. Additionally, a ‘Job Fair’ is held, as the schedule permits, at the college campus where many leading companies are invited to explain their recruitment procedures and the scenario about present and future vacancies.

5. **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, recreational and athletic programs, and co-curricular opportunities, such as, academic societies and student councils. It should be noted that an eight week internship with a reputable company is a compulsory pre-requisite for graduation. This is to give the students a foretaste of what essentially and truly happens in industry, an effort to bridge the gulf between the classroom and the industry. Furthermore, an annual dinner is planned to be held with its leading alumni and adjunct faculty, particularly those who are gold medalists or are working in top multinational organizations, to network with the corporate world for innovative curriculum development, internships, placements, sponsorships and joint activities

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	Curriculum needs updating	Board of studies reviews courses to bring in new changes.
Effectively design and construct software applications.	Final examination, assignments and reports	Every Semester	Industry collaboration	Conducting FYP Expo twice a year and inviting External evaluators.
Have a varied and balanced educational experience with an appropriate mix of theoretical	Course exams, Practical Reports, Projects,	Every Semester	Need to bring in guest speakers from	Guest speakers are invited to a class session.

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.	Assignments,		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.	Group assignments, final reports and presentation, surveys, liaisons with different organizations	Every Semester	No course related to this	EDC, time management, motivational speakers seminars.
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 year Projects	Oral communication and written skills course.

Standard 1-2

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

In order to assure that graduates of the BSCS program have achieved the program's outcomes, a summary matrix depicting the mapping of Program's learning outcomes to its objectives is shown in the following table.

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

b. Employer's survey is not available as the first batch hasn't graduated yet.

c. Alumni survey is not available as the first batch hasn't graduated yet.

d. Graduating Student's survey is not available as the first batch hasn't graduated yet.

Standard 1-3 Assessment Results and Improvement Plans

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 by faculty to encourage students.
- Students are required to attend relevant workshops and seminars conducted in SZABIST.
- Course evaluations are conducted.

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

- Introduce new courses to cater the market needs.

- Changing course delivery from traditional classroom teaching to hands-on teaching methodology.

c. Strengths and weaknesses of the program

Strengths:

- Faculty from diverse industry/corporate backgrounds
- Seminars and workshops conducted on a regular basis

Weaknesses:

- Require stronger industry collaboration
- Training opportunities offered to faculty

d. Significant future plans for the program

- Introduce new specialization areas.
- Accreditation from professional body of NCEAC.
- Membership of Professional Bodies.
- Introducing the numerical subject in first semester.
- Establishing Alumni Association.
- Establishment of Executive Development Center (EDC).
- Establishment of students societies.
- More students involvement in communities based services and learning.

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 3 years)

In the BS Computer Science program average CGPA stands as follows:

PROGRAM	YEAR	AVERAGE CGPA
BSCS - BACHELORS OF	2012	2.66

COMPUTER SCIENCE	2013	2.64
	2014	2.56

Semester	**Number of dropouts**	**Number of enrolled students**	**Dropout ratio per semester**
Fall 2011	1	20	5%
Spring 2012	-	22	0%
Fall 2012	-	14	0%
Spring 2013	-	20	0%
Fall 2013	-	14	0%
Spring 2014	6	25	24%
Fall 2014	1	20	5%
Spring 2015	-	26	0%

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

The data is not available as the first batch has not graduated yet.

c. Percentage of Student Evaluation/Assessment results for all the courses and faculty. Use Teacher Evaluation Results.

Faculty and Course Evaluations

Year	**Semester**	**BSCS Faculty & Courses Rating**					
		Excellent	**Very**	**Good**	**Satisfactory**	**Not**	**Poor**

			Good			Satisfactory	
2011	Fall	80.00%	20.00%	--	--	--	--
2012	Spring	60.00%	--	10.00%	20.00%	10.00%	--
	Fall	73.33%	20.67%	--	6.00%	--	--
2013	Spring	85.00%	15.00%	--	--	--	--
	Fall	76.00%	20.00%	--	--	4.00%	--
2014	Spring	63.33%	16.66%	6.6%	10.00%	3.3%	--
	Fall	83.33	10.11%	3.33%	3.34%	--	--
2015	Spring	88.5%	11.5%	--	--	--	--

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

List of Research Activities per faculty

Names	Journal Publications	Conference Publications	Conference Poster Paper Publications
Dr. Amir Hassan	9	4	0

Dr. Khizar Hayat	5	0	0
Dr. Aijaz Ahmed Siddiqui	1	0	0
Sumbul Ghulamani	3	4	0
Ahsan Memon	2	0	0
Sunny Kumar	0	0	1

List of Research Activities per year and Faculty Awards

Year	Activity	Details	Faculty Name
2012	Journal Paper	Performance Analysis of Bessel Beam-former in AWGN Channel Model Using Digital Modulation Technique", Research Journal of Applied Sciences, Engineering and Technology 4(21): 4408-4416, 2012, ISSN: 2040-7467, Maxwell Scientific Organization 2012.	Dr. Amir Hasan
2012	Journal Paper	Performance Analysis of Bessel Beam-Former in Rayleigh Fading channel Model using Digital Modulation Technique", Australian Journal of Electrical and Electronics Engineering, Vol-09 No 3, Institution of Engineers, Australia 2012.	Dr. Amir Hasan
2013	Journal Paper	"Parametric Variation Based Analysis AND Effective Design of Rectangular Patch Antenna for Bluetooth Application", IOSR Journal of Electronics and Communication Engineering, Volume 7, Issue 2 (Jul. - Aug. 2013), PP 40-45	Ahsan Memon
2013	Conference Paper	Hand Gesture Recognition Based on Digital Image Processing using Matlab, 1st International Conference on Sensing for Industry, Control, Communication &	Dr. Amir Hasan

Year	Activity	Details	Faculty Name
		Security Technologies, ICSICCST-2013, held on June 24, 2013 t H.E.J, University of Karachi, Pakistan.	
2013	Conference Paper	Implementation of Blind Beam forming Algorithms on Adaptive Antenna Array in Rayleigh Fading Channel Model, 1st International Conference on Sensing for Industry, Control, Communication & Security Technologies, ICSICCST-2013, held on June 24, 2013 t H.E.J, University of Karachi, Pakistan.	Dr. Amir Hasan
2014	Research Grant	1st Sept: 2011, Beijing, Government Scholarship Total Award Amount = (RS:1920000) up to 31st July 2014	Dr Khizar Hayat
	Research Grant	1st March 2012, Beijing University of Posts and Telecommunications (BUPT) China = (RS:576000), up to 31st July 2014	Dr Khizar Hayat
2015	Research Award	Winner in PhD Symposium in IMTIC 2015, organize by MUET in February 2015	Sumbul Ghulamani
2015	Research Book Chapter	Security Issues in Sensor Networks and Countermeasures, Handbook of Research on Network Security Attacks and Countermeasures, *(IGI Global, Book Chapter Publication, Accepted for November 2015 edition of book),*	Ahsan Memon

e. Number of short courses workshops, seminars organized on community service level

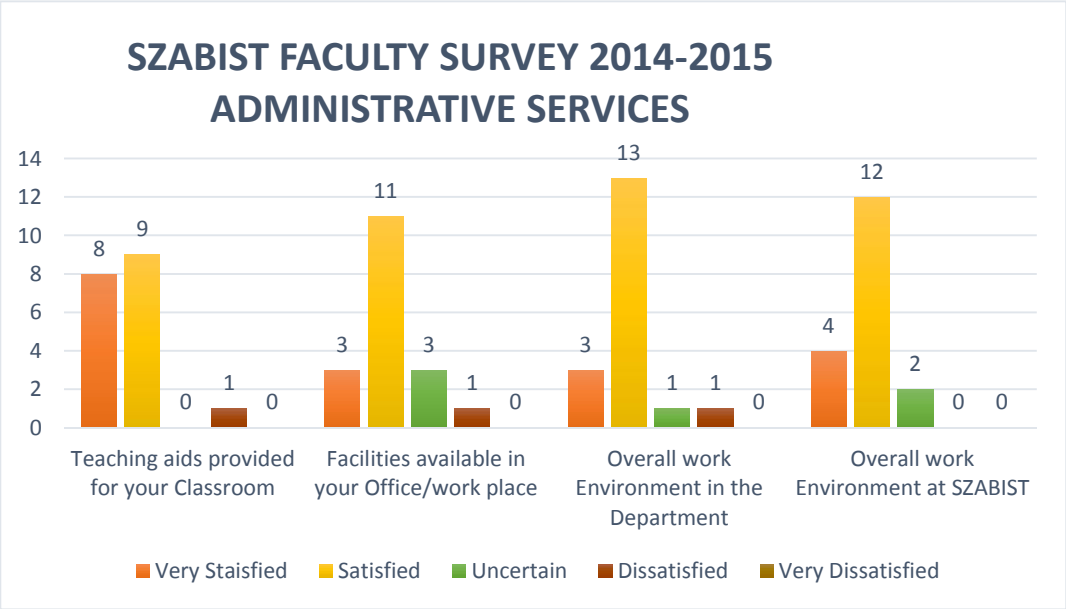
S.No	Activity	Year
1	Daily necessities and cash donations from staff salary and students to Thar drought victims	2014

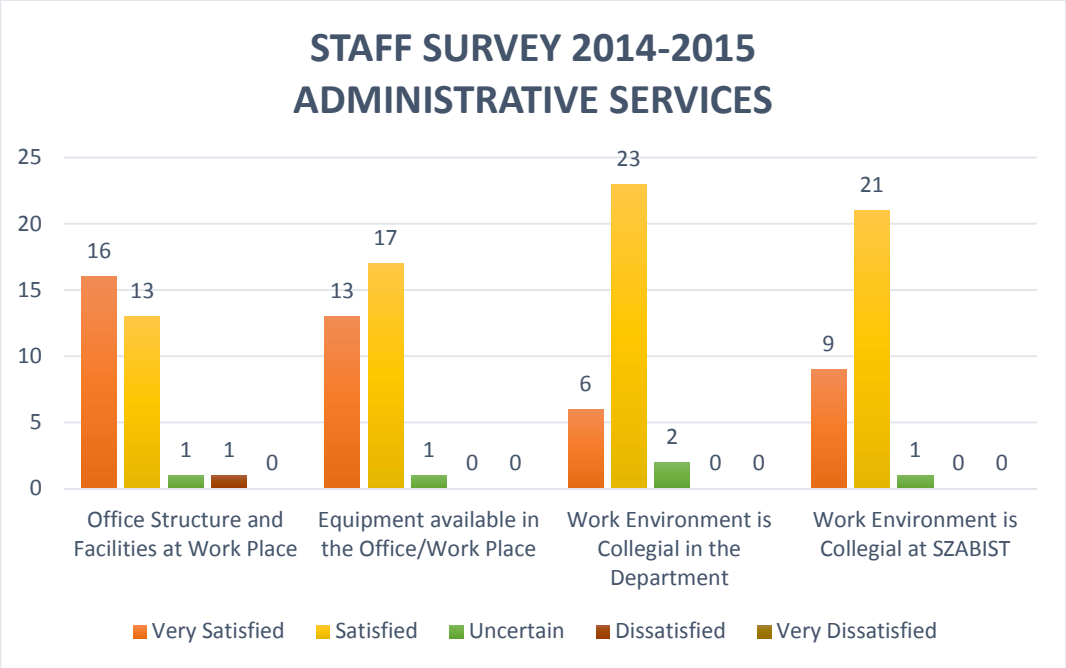
2	Distribution of warm clothing to the needy people of Hyderabad during winter	2014
3	The students of the campus also spent one complete day with disabled children in Hyderabad and gave them gifts.	2012
4	Needy students in Hyderabad have been provided with books, clothing and other gifts as part of the continual efforts to uplift the social status of people.	2013
5	Participation of students as volunteer services at Agha Khan Maternity and Child Care Center Hyderabad.	2012-2014
6	Visit of Deaf Reach Schools staff members of Szabist Hyderabad campus	2014

f. Faculty survey results to measure the administrative services provided

Graduating student survey not provided as there are no graduates from this program

Administrative Services





Criterion: 2

Curriculum Design & 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 & Organization

Standard 2-1 Courses vs 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 two
- hour 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 four.
- 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

CORE COURSE		ELECTIVES					
1	2	3	4	5	6	7	8
CSC1102 English Composition and Comprehension (3,0)	CSC1203 Object Oriented Programming (2,1)	CSC2101 Communication & Presentation Skills (3,0)	CSC2202 Computer Network & Data Communications (3,1)	CSC3103 Introduction to Software Development (3,1)	CSC 4xxx Elective 1(3,0)	CSC4105 Final year Project - I (0,3)	CSC4205 final year Project - II (0,3)
CSC1104 Introduction to Computing (2,1)	CSC1205 Technical and Business Writing (3,0)	CSC2104 Linear Algebra & Differential Equations (3,0)	CSC2203 Relational database management system (3,1)	CSC 4xxx University Elective - 1 (3,0)	CSC3202 Design & Analysis of Algorithms(3,0)	CSC4102 Professional Practices (3,0)	CSC 4xxx University Elective – 2 (3,0)
CSC1101 Calculus and Analytical Geometry (3,0)	CSC1204 Physics (3,1)	CSC2205 Operating Systems Concepts(3,1)	CSC2201 Computer Organization and Assembly Language(3,0)	CSC3104 Software Engineering- I (3,1)	CSC4xxx CS Elective 2 (3,0)	CSC4101 Artificial Intelligence (3,0)	CSC4xxx CS Elective 5 (3,0)
CSC1105 Islamiat& Pakistan Studies / Humanities (3,0)	CSC1202 Multivariate Calculus (3,0)	CSC2103 Digital Logic Design (3,1)	CSC2204 Finite Automata Theory and Formal Languages (3,0)	CSC3101 Computer Architecture (3,1)	CSC3203 Numerical Computing (3,0)	CSC4xxx CS Elective 3 (3,0)	CSC4xxx CS Elective 6 (3,0)
CSC1103 Fundamentals of Programming (3,1)	CSC1201 Discrete Mathematical Structures (3,0)	CSC2102 Data Structures and Algorithms (2,1)	CSC2105 Statistics & Probability (3,0)	CSC3102Human Computer Interaction (3,0)	CSC3201 Compiler Construction (3,0)	CSC4xxx CS Elective 4 (3,0)	CSC4xxx CS Elective 7 (3,0)

d. Curriculum Course Requirement

Semester	Category (Credit Hours)			
	Math & Basic Science	**Core Courses**	**Humanities & Social Sciences**	**Other**
1	CSC1101 Calculus and Analytical Geometry (3,0)		CSC1102 English Composition and Comprehension (3,0)	CSC1103 Fundamentals of Programming (3,1)
1				CSC1104 Introduction to Computing (2,1)
2	CSC1202 Multivariate Calculus (3,0)	CSC1204 Physics (3,1)	CSC1205 Technical and Business Writing (3,0)	CSC1203 Object Oriented Programming (2,1)
2		CSC1201 Discrete Mathematical Structures (3,0)		
3	CSC2104 Linear Algebra & Differential Equations (3,0)	CSC2103 Digital Logic Design (3,1)	CSC2101 Communication & Presentation Skills (3,0)	CSC2102 Data Structures and Algorithms (2,1)
3	CS1212 Statistics & Probability (3,0)			
4		CSC2201 Computer Organization and Assembly Language(3,0)		CSC2202 Computer Network & Data Communications (3,1)
4		CSC2204 Finite Automata Theory and Formal		CSC2203 Relational database management system (3,1)

Semester	Category (Credit Hours)			
	Math & Basic Science	**Core Courses**	**Humanities & Social Sciences**	**Other**
		Languages (3,0)		
4				CSC2205 Operating Systems (3,1)
5		CSC3103 Introduction to Software Development (3,1)		CSC4xxx University Elective - 1 (3,0)
5		CSC3101 Computer Architecture (3,1)		CSC3104 Software engineering concepts (3,1)
5				CSC3102 Human Computer Interaction (3,0)
6		CSC3202 Design & Analysis of Algorithms(3,0)		CSC4xxx CS Elective 1(3,0)
6		CSC3201 Compiler Construction (3,0)		CSC4xxx CS Elective 2 (3,0)
6				CSC3203 Numerical Computing (3,0)
7		CSC4101Artific ial Intelligence (3,0		CSC4xxx Final year Project - I (2,1)
7				CSC4102 Professional Practices (3,0)

Semester	Category (Credit Hours)			
	Math & Basic Science	**Core Courses**	**Humanities & Social Sciences**	**Other**
7				CSC4xxx CS Elective 3 (3,0)
7				CSC4xxx CS Elective 4 (3,0)
8				CSC4205 Final year Project - II (2,1)
8				CSC4xxx University Elective – 2 (3,0)
8				CSC4xxx CS Elective 5 (3,0)
8				CSC4xxx CS Elective 6 (3,0)
8				CSC4xxx CS Elective 7 (3,0)

For each course in the program, Please find the attached course outline consist of the following

- Course title
- Catalog Description
- Syllabus breakdown in lectures
- Laboratory
- Course objectives and outcomes
- Text book(s) and references
- Computer usage

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 being offered are programming, algorithms and data structures, databases, software engineering concepts, senior projects, etc. 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.

f. List the courses and tick against relevant outcomes.

Courses versus Outcomes

Course	Title	1	2	3	4	5	6	7	8	9	10
CSC1101	Calculus & Analytical Geometry	✓				✓				✓	
CSC1204	Physics-I					✓				✓	
CSC1102	English Composition & Comprehension					✓		✓			
CSC1104	Introduction to Computing	✓	✓		✓	✓	✓		✓	✓	
CSC1105	Islamiat & Pakistan Studies					✓		✓			
CSC1103	Programming Fundamentals	✓	✓	✓	✓	✓	✓		✓	✓	✓
CSC1203	Object Oriented Programming	✓	✓	✓	✓	✓	✓		✓	✓	✓
CSC1205	Technical & Business Writing					✓	✓	✓	✓	✓	
CSC2105	Statistics & Probability	✓				✓				✓	
CSC1201	Discrete Mathematical Structures	✓				✓				✓	
CSC4xxx	Core					✓					
CSC4xxx	University Elective					✓					
CSC2101	Communication & Presentation Skills					✓	✓	✓	✓	✓	

CSC2103	Digital Logic & Computer Architecture	✓	✓	✓	✓	✓	✓		✓	✓	✓
CSC2102	Data Structures & Algorithms	✓	✓	✓	✓	✓	✓		✓	✓	✓
CSC4xxx	Core					✓					
CSC4xxx	University Elective					✓					
CSC4xxx	University Elective					✓					
CSC2205	Operating Systems		✓		✓	✓				✓	✓
CSC2203	Relational database management system	✓	✓		✓	✓	✓		✓	✓	✓
CSC2104	Linear Algebra & Applications	✓				✓					
CSC4xxx	Core					✓					
CSC4xxx	Core					✓					
CSC4xxx	University Elective					✓					
CSC2202	Computer Networks & Data Communication	✓	✓	✓	✓	✓	✓		✓	✓	✓
CSC3104	Software engineering concepts -I	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CSC4xxx	Core					✓					
CSC4xxx	Elective					✓					
CSC4xxx	University Elective					✓					
CSC4xxx	University Elective					✓					
CSC4xxx	Core					✓					
CSC4xxx	Core					✓					
CSC4xxx	Elective					✓					
CSC4xxx	Elective					✓					

CSC4xxx	University Elective					✓					
CSC4105	Final year Project - I	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Course	Title	1	2	3	4	5	6	7	8	9	10
CSC4501	Business & Technology Ethics					✓			✓	✓	✓
CSC4xxx	Core					✓					
CSC4xxx	Core					✓					
CSC4xxx	Elective					✓					
CSC4xxx	Elective					✓					
CSC4604	Research Report	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CSC4205	Final year Project - II	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CSC4xxx	Elective					✓					
CSC4xxx	Elective					✓					
CSC4xxx	University Elective					✓					
CSC4xxx	University Elective					✓					

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	CSC1101, CSC1102, CSC1104, CSC1105, CSC1205, CS2311, CSC1202, CSC1204, CS2314
Problem Analysis	CS1212 CS2313 CS2421 CS2411 CS2305 CS3619 CS4802
Solution Design	CSC1203, CSC4702, CSC4709, CSC4809

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 Computing	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 [1]			Psychology
	Operating Systems			International Relations
	Introduction to Relational database management system			Foreign/Regional Language (French, German, Sindhi, Punjabi, Urdu

				etc.)
	Introduction to Software engineering concepts [1]			Philosophy
	Computer Communications and Networks [1]			
	Human Computer Interaction			
	Senior Design Project			
RED: HEC COURSE				
Total Courses:25		**Total Credit Hours: 82**		

Standard 2-4 Major Requirements as Specified by Accreditation Body

Program	Computing Core	Supporting Courses	General Education	Electives
BS Computer Science	Introduction to Computing	Calculus and Analytical Geometry	English Comprehension and Composition	Distributed Computing
	Programming Fundamentals	Probability and Statistics	Technical and Report Writing	Digital Image Processing
	Object Oriented Programming	Linear Algebra	Communication and Presentation Skills	Data ware Housing

	Discrete Structures		Islamic and Pakistan Studies	Android Application Development
	Data Structure and Algorithms		Professional Practices	Mobile Communications
	Digital Logic and Design [1]			Database Development
	Operating Systems			Web Engineering
	Introduction to Relational database management system			
	Introduction to Software engineering concepts [1]			
	Computer Communications and Networks [1]			
	Human Computer Interaction			
	Senior Design Project			
Total Courses:40		**Total Credit Hours:130**		
Red - HEC Core		**Green - SZABIST specific course**		**Blue - NCEAC Course**

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
BSCS	1. English Comprehension and Composition 2. Technical and Report Writing 3. Communication and Presentation Skills 4. Islamic and Pakistan Studies 5. Professional Practices	1. Distributed Computing 2. Digital Image Processing 3. Data ware Housing 4. Android Application Development 5. Mobile Communications 6. Database Development 7. Web Engineering

Standard 2-6 Information Technology Content Integration throughout the Program

a. List the courses required by the Accreditation Body.

Program	IT Courses
BSCS	1. Introduction to Computers 2. Programming fundamentals 3. Object oriented programming 4. Data structures and algorithms 5. Operating systems 6. Computer organization and assembly language 7. Computer networks and data communication 8. Software engineering concepts

	9. Analysis of algorithms

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

- Introduction to computing is an introductory course which is set to help students familiarize themselves more with Microsoft Office, World Wide Web and basics of computing. 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 one of indispensable 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 concepts 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. Software Reengineering
9. Integration & Testing

The above listed topics help students understand how software engineering concepts 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 Communication Skills (Oral & Written)

a. List the courses required by the Accreditation Body.

Program	**Courses**
BSCS	1. Technical and Business writing, 2. English Composition and Comprehension 3. Communication and Presentation Skills

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 theirs.

Criterion: 3

Laboratories and Computing Facilities

Standard 3-1	**Lab Manuals/ Documentations/ Instructions**
Standard 3-2	**Adequate Personnel Support for Lab**
Standard 3-3	**Adequate Computing Infrastructure & Facilities**

Criterion: 3

Laboratories and Computing Facilities

Standard 3-1 Lab Manuals/ Documentations/ Instructions

At SZABIST Hyderabad, students and faculty have complete access to facilities in the laboratories that are powered by a CIR ADSL internet connection. Wi-Fi is enabled in the campus enabling portable devices to access the network resources wirelessly. There are four labs open for students from 8:00 am to 9:30 pm - Monday to Saturday.

No students have the authorization to install additional software on lab computers. Any additional software that is used for a course assignment has to be approved in written by the concerned faculty and the Network Administrator has to be duly intimated. A power back up is available for all computers with UPS facility in order to cater sudden power outages. 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

b. Are the resources available sufficient for the program?

Resources are adequate and sufficient for BBA program

Detail of Labs in SZABIST Hyderabad

Laboratory Title	Computing Lab
Location	4th Floor
Adequacy for Instruction	Available
Objectives	For holding course and lab sessions related to software design and development, databases, operating systems and general computing. Online Tests For Internet usage To access HEC Digital Library
Courses Taught	Programming Fundamentals, Relational database management system, Object Oriented Programming, Software engineering concepts , Compiler Construction, Data Structures and Algorithms.
Software available if applicable	Windows 7 Professional operating system enabled workstations. Microsoft Office 2010 (Word, Excel, PowerPoint, MS Visio, MS Project), MS Visual Studio, Oracle 10g and Developer/6i, Turbo C++, SPSS 14, Client software for OS/400 and other major utilities installed.
Safety Regulations	Available

Laboratory Title	Software Lab
Location	4th Floor
Adequacy for Instruction	Available
Objectives	For holding course and lab sessions related to software design and development, databases, operating systems and general computing. Online Tests For Internet usage To access HEC Digital Library
Courses Taught	Programming Fundamentals, Relational database management system, Object Oriented Programming, Software engineering concepts , Compiler Construction, Data Structures and Algorithms.
Software available if applicable	Windows 7 Professional operating system enabled workstations. Microsoft Office 2010 (Word, Excel, PowerPoint, MS Visio, MS Project), MS Visual Studio, Oracle 10g and Developer/6i, Turbo C++, SPSS 14, Client software for OS/400 and other major utilities installed.
Safety Regulations	Available
Laboratory Title	DLD & Physics Lab
Location	4th Floor
Adequacy for Instruction	Available
Objectives	For holding course and lab sessions related to physics, basic electronics, digital logic and computer architecture.
Courses Taught	Physics and basic electronics, digital logic and design, computer architecture.
Software available	

Safety Regulations	Available

Laboratory Title	Network Lab
Location	3rd Floor
Adequacy for Instruction	Available
Objectives	For holding course and lab sessions related to data communications, computer networks, advanced operating systems, and distributed computing.
Courses Taught	System Administration, Operating Systems, Computer Networks and Data Communications, Mobile Communications
Software available if applicable	Windows 7 Professional operating system enabled workstations. Microsoft Office 2010 (Word, Excel, PowerPoint, MS Visio, MS Project), Packet Tracer 6.1, GNS 3.0, MS Visual Studio, Oracle 10g and Developer/6i, Turbo C++, SPSS 14, Client software for OS/400 and other major utilities installed.
Safety Regulations	Available

Standard 3-2 Adequate Personnel Support for Lab

DESIGNATION	**NO. OF PEOPLE**
Supervisors	
Network administrator	1
Lab administrator	1
Computer Lab staff	
Computing Lab	1 (morning) 1 (evening)

Software Lab	1 (morning)
DLD & Physics Lab	1 (morning)
Network Lab	1 (morning)

Labs with respect to personnel and timings in SZABIST Hyderabad

COMPUTER LAB SHIFTS per Lab	TIME SLOTS	PERSONNEL
Morning	8.00 am – 4.00 pm	2
Evening	1.30 pm – 9.30 pm	1

Standard 3-3 Adequate Computing Infrastructure and Facilities

a. Describe how the computing facilities support the computing component of your program

No.	Particulars	Quantity
1	Servers	01
2	Desktop Computers	115
3	Video Conferencing Equipment	Nil
4	Color Scanners	01
5	Printers	05
6	Multimedia Projectors	14
7	Local Area Network with 250+ nodes, CISCO 2600 Series Routers, CISCO 2950 series of switches, Laser Printers, Color Printers, Finger Print Devices, Multimedia Equipment and a rich Software Library	Color Printer: 01 Finger Print devices: 02

b. Shortcomings in computing infrastructure and facilities[1]

Based on the information given above, it is concluded that the computer lab facilities for computing and software lab adequate for the BSCS Program at SZABIST. On the other hand the network lab and DLD and physics lab require certain equipment such as routers, switches, LED bundles, transistor and resistor boxes.

[1] Source of information is: Head of IT, Manager Systems, Computer lab staff.

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 & 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 for the final year of program. If 10 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 20 to 30 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.
- 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 take electives courses from the 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 most of the 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.

Standard 4-2 Effective Faculty / Student Interaction

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

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

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 professional seminars, orientations, workshops, teachers and Managers.

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.

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

Students can reach out to the designated staff members who act as student advisors and counselors. 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 recently started an ACM chapter in the campus and the student memberships are open. SZABIST Hyderabad has recently established the Microsoft Student Partner (MSP) chapter as well. Students also interact with practitioners in seminars and workshops arranged by this chapter. The campus is dedicated to enhance the opportunities students have to be successful in their professional as well as personal life. Students are being facilitated to adapt to new and developing circumstances that challenge their growth as they progress through each grade. Such support includes academic guidance, career counseling, professional grooming, and student support.

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. Eligibility criteria is: Minimum A-Levels with 3 passes / Intermediate (50% marks, including first year no supplementary) or equivalent from a recognized institution.

Re-Admission after Dismissal

A student is allowed to take the admission after dismissal subject to following rules:

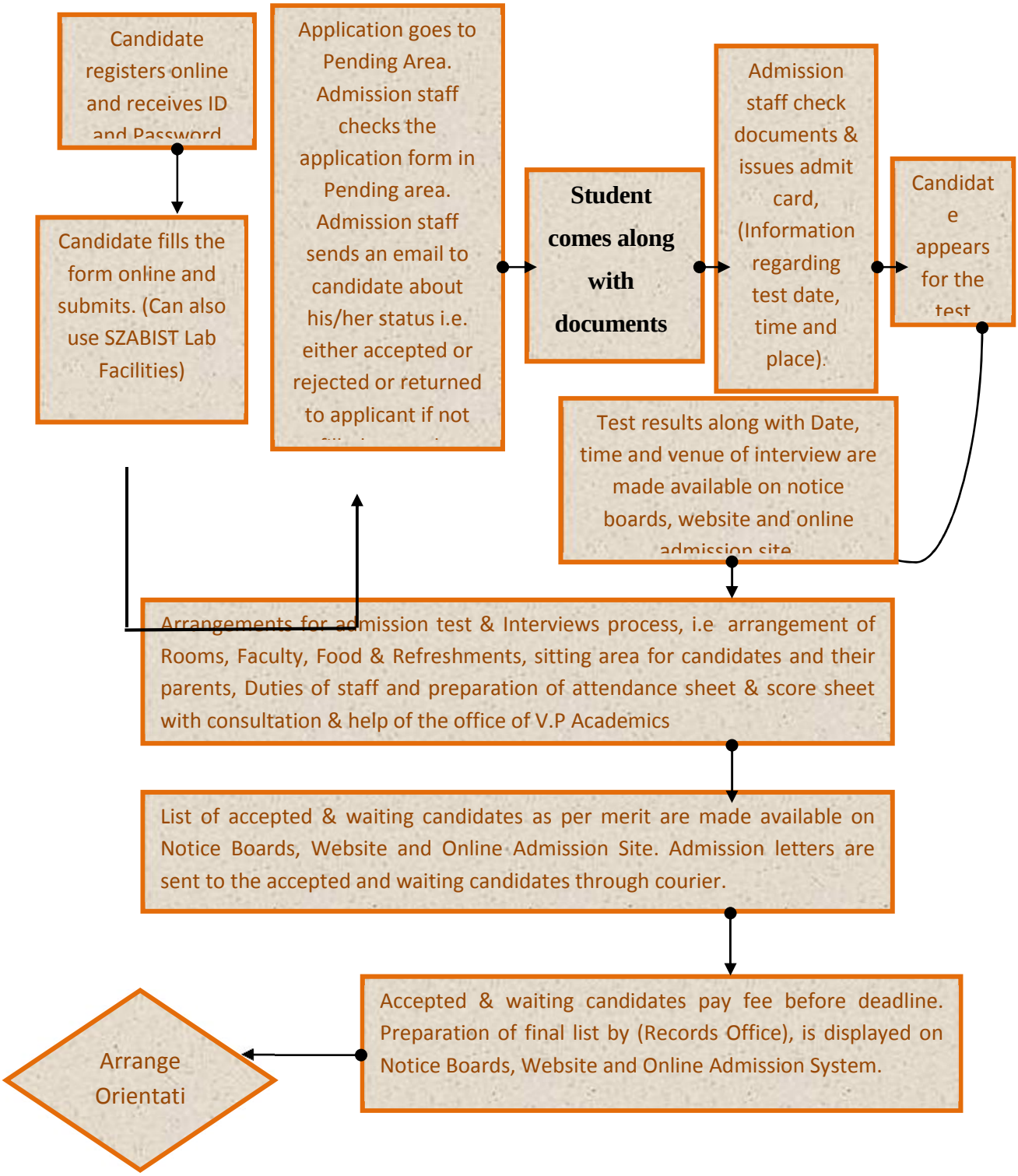
- *Cancellation of provisional admission or dismissing on time barring of degree:*

Re-admission is allowed after meeting the admission criteria and requirements including again passing test and interview. No credit transfer is allowed.

- *Dismissal on academics through probation/ dismissal due to academic dishonesty/ dismissal on disciplinary grounds:*

Not allowed re-admission in any campus, any program; credit transfer not applicable

b. Admission Process Flowchart



SZABIST offers BS Computer Science admission on semester basis. Admission process will begin from April 27 to June 14 through different mediums, i.e. SZABIST website www.szabist.edu.pk and hyd.szabist.edu.pk along with advertisement in leading national newspapers seminars and workshops. The detail schedule of admission process is as below:

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

BS Computer Science

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

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

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.
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

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

MONITORING STUDENT PROGRESS

- **Attendance:**

Students are required to maintain 80% attendance throughout the semester in order to qualify for the final exam. Maximum 3 absences are allowed per semester per course. Two late arrivals are equal to 1 absence. In case of non-compliance of attendance rules, a letter grade F will be given in the course.

- **Midterm and Final Examination Policy:**

A mid-term exam for the BSCS program is administered in the 7th session. The mid-term exams account for 30% per cent of the final grade and the maximum duration is 2 hours.

The Final Exam is generally of three hours duration. Depending on the course content, examinations could be a combination of written and applicative questions.

Term papers and Projects can be up to 20%, depending on the course content while a deviation of 10% is permissible at the faculty's discretion.

Passing Grades:

Minimum passing grade in each course is C- for BSCS program courses. F grade in a course does not count as having met the pre-requisite for taking an advanced course. Students with 'repeat grades' such as D or F must take the course next time it is offered.

Student who have a D grade, are not exempted from attendance, quizzes, and assignments.

Probation & Dismissal on Academic Grounds:

SZABIST follows the probation and dismissal policy as recommended by HEC "whenever CGPA of student falls below the CGPA 2.00, he/she will be placed on "first probation" for the next semester. If in the first probation semester the student does not increase his/her CGPA to the required 2.00 CGPA, he /she will be placed on "second probation" for the next semester. If in the second probation semester the student does not increase his/her CGPA to the required CGPA of 2.00, he/she will be dismissed from SZABIST

Summer semester are not counted for probation/dismissal as they are remedial semesters.

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

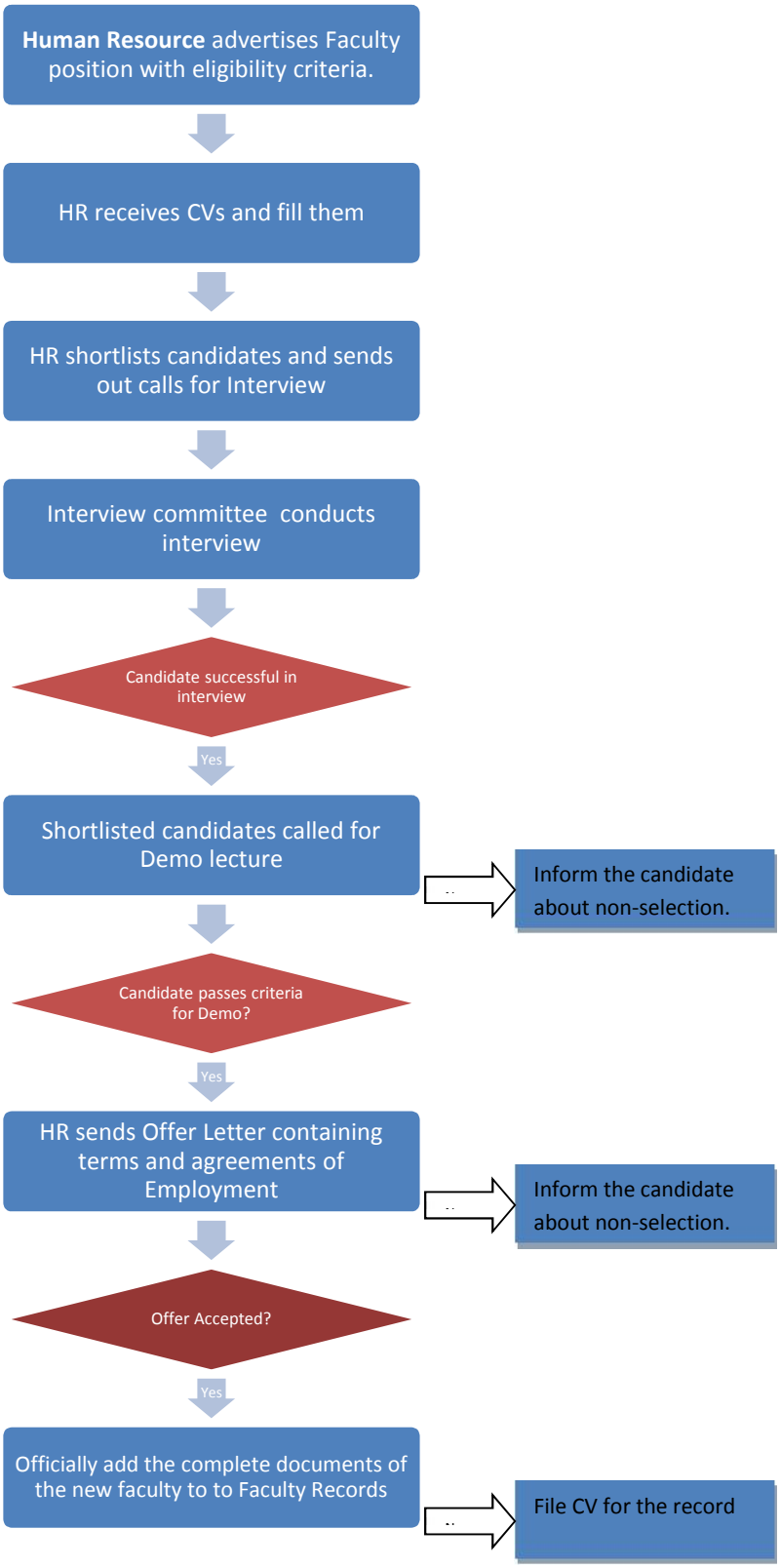
a. Describe the process used to ensure that highly qualified faculty is recruited to the program.

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 Head of Campus, 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


Human Resource advertises Faculty position with eligibility criteria.
HR receives CVs and fill them
HR shortlists candidates and sends out calls for Interview
Interview committee conducts interview
Candidate successful in interview
Yes
Shortlisted candidates called for Demo lecture
Inform the candidate about non-selection.
Candidate passes criteria for Demo?
Yes
HR sends Offer Letter containing terms and agreements of Employment
Inform the candidate about non-selection.
Offer Accepted?
Yes
Officially add the complete documents of the new faculty to to Faculty Records
File CV for the record

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 campus. 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	12 research publications in an HEC recognized Journals

				organization.	

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 Head of Campus 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 appraisals are kept under consideration 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 Multimedia & White board at all locations whereas Internet facility & Computers are available at all classes etc.

Faculty monitors and responses 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 5^{th}-6^{th} week all the faculty members are evaluated by the students for their methods of teaching and delivery of course material. If a permanent or visiting faculty member scores less the 60% in the evaluation, the Head of Campus informs him/her about the scores and allots time for improvement. After two weeks they are re-evaluated.

Standard 5-5 Program Requirements Completion Process

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. 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 Head of Campus, President and Chancellor.

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 Qualification & Number**

Standard 6-2 **Current Faculty Scholarly Activities & Development**

Standard 6-3 **Faculty Motivation & Job Satisfaction**

Criterion: 6

Faculty

Standard 6-1 Program Faculty Qualification and Number

a. Faculty Names and Detailed Resumes

- Dr. Amir Hassan

  B.Sc. (Hons) Physics, M.Sc Communication Technology, Ph.D (Telecommunications)

  Professor

  Email: amir@hyd.szabist.edu.pk

- Dr. Aijaz Ahmed Siddiqui

  B.A Mathematics, M.A. Applied Mathematics, Ph.D (Mathematics)

  Assistant Professor

  Email: dr.aijaz@hyd.szabist.edu.pk

- Sumbul Ghulamani

  BCS (Hons), MCS

  Assistant Professor

  Email: sumbul.ghulamani@hyd.szabist.edu.pk

- Dr. Khizer Hayat

  BSc (Hons), MSc, PhD.

  Assistant Professor

  Email: drkhizer.hayat@hyd.szabist.edu.pk

- Mr. Sunny Kumar

  BE-TL

  Lecturer / Program Manager (BSCS)

  Email: sunny.kumar@hyd.szabist.edu.pk

- Ms. Saira Muzafar

  BE-CS

  Lecturer

  Email: saira.muzafar@hyd.szabist.edu.pk

- Mr. Saqib Saeed

  BE-CS

  Lecturer Cum Computer Lab Administrator

  Email: saqib.saeed@hyd.szabist.edu.pk

- Mr. Umair Jamil Ahmad

  BS-IT, MBA

  Lecturer

  Email: umair.qureshi@hyd.szabist.edu.pk

- Mr. Ahsan Memon

  BE-TL

  Lecturer

  Email: ahsan.memon@hyd.szabist.edu.pk

Refer to Appendix B for detailed resumes.

b. Faculty Distribution in BSCS

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**
English & Report Writing	4 courses	Full Time: 1	0
Telecommunication & Networking	3 courses	Full Time: 1	0
Programming & Algorithms	7 courses	Full Time: 1	0

Core Computer Science& Software engineering concepts	8 courses	Full Time: 2	1
Physics & electronics	2course	Full Time: 1	0
Automation, control & Intelligent systems	4 courses	Full Time: 1	0
Mathematics	5 courses	Full Time: 1	1
Management & Humanities	2 courses	Full Time: 1	1

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 recent editions for text and reference books
2. Presenting and publishing papers
3. Incorporating their learning into their teaching through content and methodology
4. Pursuing further education in their specialized field
5. Take part in professional activities that are taking place in the campus
6. Supervising projects at bachelors level

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

SZABIST provides a conducive environment that contributes in professional and personal development learning of the faculty members. Additionally, SZABIST ensures that a faculty member is not burdened with responsibilities aside of teaching and professionally rich

responsibilities that contribute to the development of faculty member in practice. SZABIST also creates time and space for faculty to integrate their competing faculty roles of teaching, scholarship, and service, and to achieve greater balance in their personal and professional lives.

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

Faculty development programs are considered a vital part of learning at SZABIST. Therefore full time faculty members are eligible to enroll in Postgraduate programs free of charge. Additionally, faculty members are encouraged to participate in research activities and publications through incentive of monetary rewards. The prospect is also nourished by encouraging the young faculty members to take part in cumulative research efforts led by senior faculty members. The strategy greatly benefits 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, collectively by accomplishing greater milestones by utilizing their diverse fields of interests into an enhanced application.

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

Every month an academic heads meeting involving Head of Campus and Program Managers of all programs is held. Additionally, monthly faculty meetings are scheduled between faculty, Program Manager and Head of Campus to address any academic and administrative issues, thereby ensuring smooth running of the program. Furthermore, for each course faculty evaluation is carried out using student feedback and in light of this feedback Program Manager interacts with faculty to optimize the overall learning experience.

Standard 6-3 Faculty Motivation & Job Satisfaction

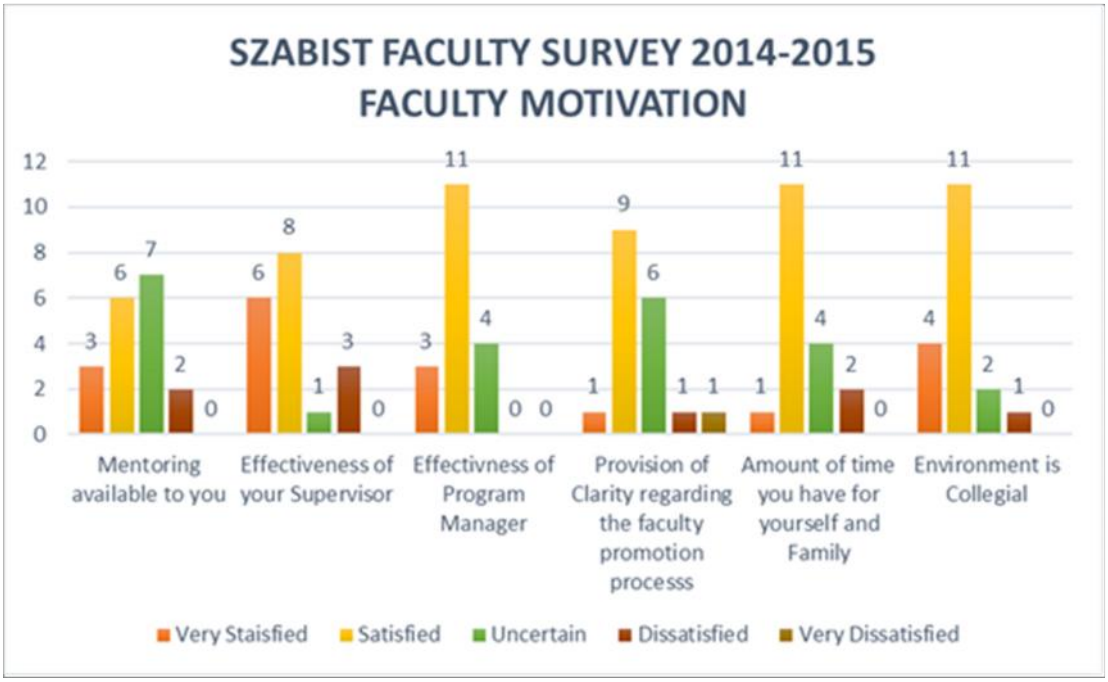
a. **Describe programs and processes in place for faculty motivation**

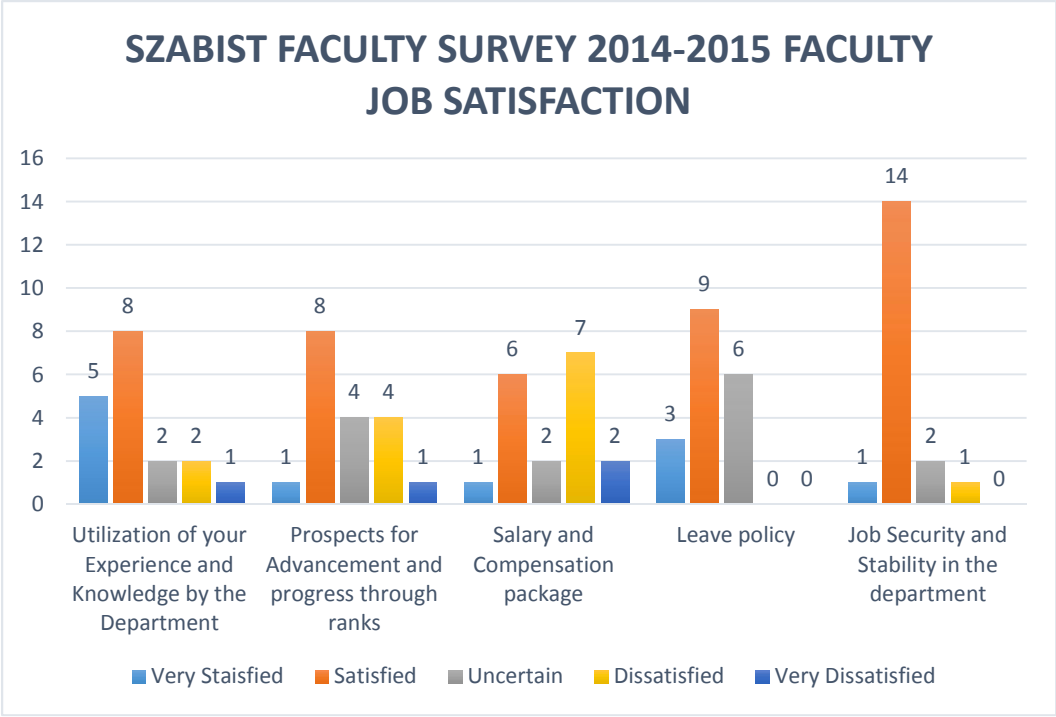
b. **Indicate how effective these programs are.**

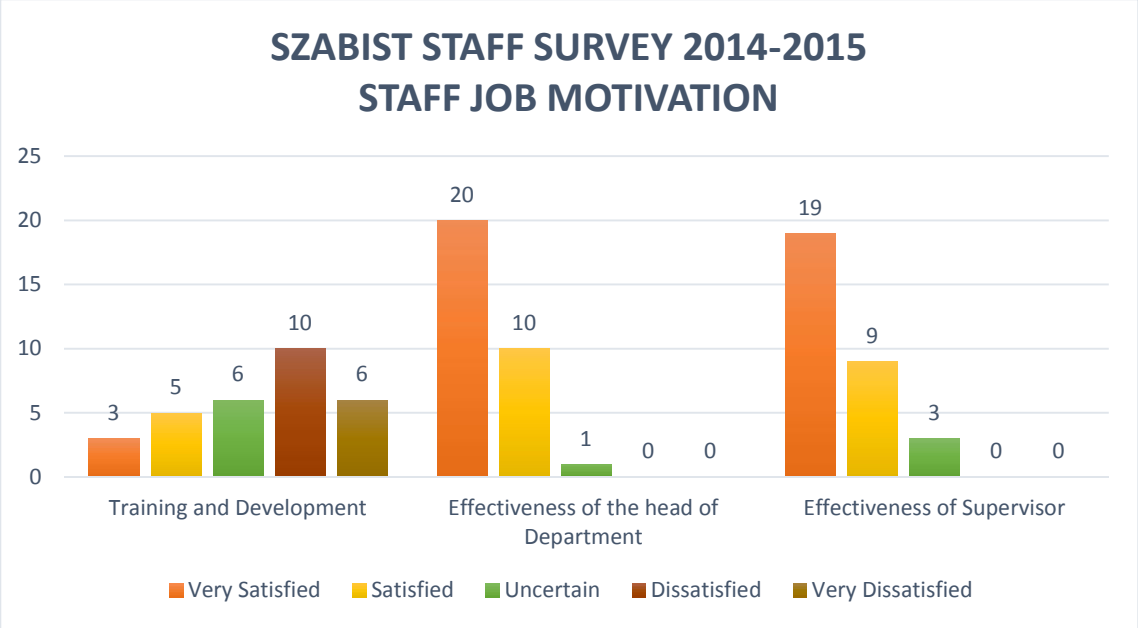
Processes for Faculty Motivation	Process Effectiveness
Free of cost Higher Education for full-time faculty.	Employees get the opportunity of personal and professional growth by acquiring education free of cost.
Performance Merit Increment.	The merit increment motivates the urge for efficiency.
Performance Bonus.	
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%.	The sponsorship encourages the drive for research publications without the worry of paying a huge fee.
Honoraria for writing articles and publish in reputed journals and magazines.	
Study leave.	Faculty members opting for a study leave return with greater and deeper knowledge of the respective field
Continuing Education Facility.	
Flexible working hours.	The flexible timing enables the employees to manage their time on campus with the time of their classes.

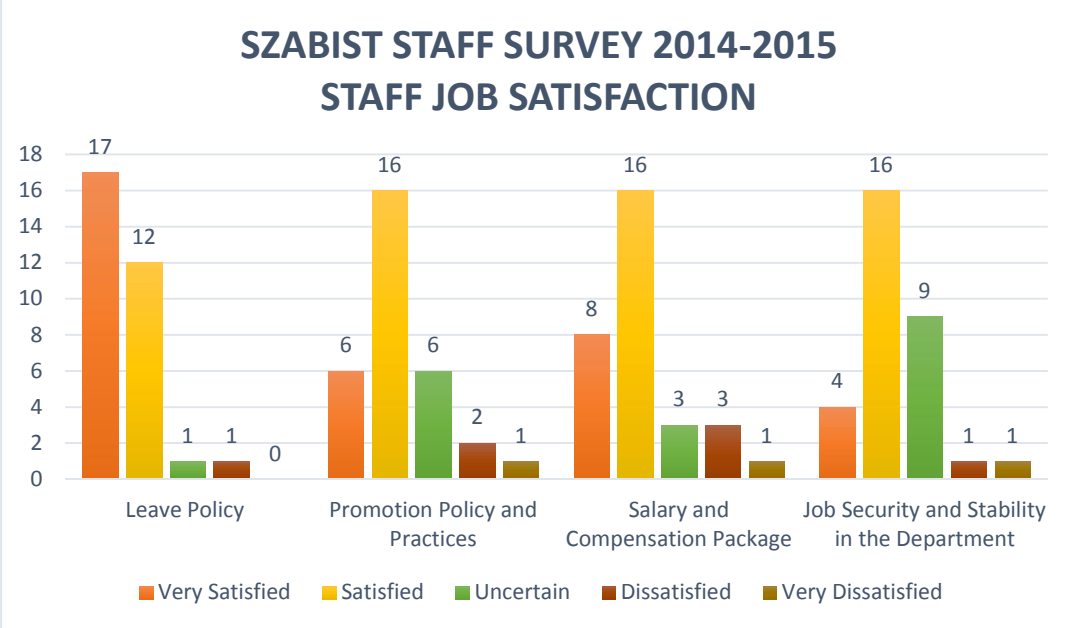
Source of information: HR Manager.

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






SZABIST STAFF SURVEY 2014-2015
STAFF JOB MOTIVATION
25
20
15
10
5
0
3
5
6
10
6
20
10
1
0
0
19
9
3
0
0
Training and Development
Effectiveness of the head of Department
Effectiveness of Supervisor
Very Satisfied
Satisfied
Uncertain
Dissatisfied
Very Dissatisfied


SZABIST STAFF SURVEY 2014-2015
STAFF JOB SATISFACTION
18
16
14
12
10
8
6
4
2
0
17
12
1
1
0
6
16
6
2
1
8
16
3
3
1
4
16
9
1
1
Leave Policy
Promotion Policy and Practices
Salary and Compensation Package
Job Security and Stability in the Department
Very Satisfied
Satisfied
Uncertain
Dissatisfied
Very Dissatisfied

Criterion: 7

Institutional Facilities

Standard 7-1 **New Learning Trends**

Standard 7-2 **Library Collection and Staff Resources**

Standard 7-3 **Classrooms and Offices**

Criterion: 7 Institutional Facilities

Standard 7-1 New Learning Trends

At SZABIST Hyderabad, new learning trends are welcomed with great enthusiasm and significant efforts are made to make sure that students are given every chance to excel in their studies by all means possible. This includes the introduction of interactive CBT sessions in class, innovative practical puzzle oriented solutions and most important of all is the HEC digital library which allows some of the best research resources to be accessed by students.

Some of the most notable contributors to the HEC digital library are:

- The ASTM Standards & Engineering Digital Library, which is a vast collection of industry-leading standards and technical engineering information. It covers a broad range of engineering disciplines, including aerospace, biomedical, chemical, civil, environmental, geological, health and safety, industrial, materials science, mechanical, nuclear, petroleum, soil science and solar engineering.
- Ebrary, which offers a wide variety of multidisciplinary content. It acquires large number of titles from leading academic publishers.
- IET digital library, which offers over 10 high impact factor research journals in electrical, electronics, telecommunication engineering and information technology.
- The Institute for Operations Research and the Management Sciences (INFORMS) is the largest professional society in the world for professionals in the field of operations research. INFORMS publishes 12 scholarly journals that describe the latest O.R. methods and applications and a membership magazine with news from across the profession.
- Project MUSE provides access to 430 full-text journals from 108 publishers in humanities and social science.
- SpringerLink provides access to 503 full-text Springer-Verlag Journals and 738 full-text journals formerly published by Kluwer Academic Publishing. It is one of the world's leading information services for science and technology journals.

- 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.
- The Journals Division of the University of Chicago Press distributes nearly 50 journals and hardcover serials, presenting original research from international scholars in the social sciences, humanities, education, biological and medical sciences, and physical sciences.
- Wiley-Blackwell's online database containing over 1,234 journals in science, technology, medicine, humanities and social sciences.
- The World Bank e-Library is an electronic portal to the World Bank's full-text collection of books, reports/working papers, journals and other documents on social and economic development.
- McGraw-Hill is an innovative online resource that provides students and researchers with instant answers from the most trusted sources. Currently provides 8,500 Encyclopedia and Research Update articles by leading researchers, including Nobel Prize winners, more than a 100,000 terms from Dictionary of Scientific and Technical Terms along with 14,000 illustrations plus animations and image galleries and 65,000+ hyperlinked cross-references.

Describe how adequate the lab facilities are for e-learning

Domain server:[2]

HP Proliant G7 rack mount based Server Intel Xeon dual processor 3.0 GHz, 4GB ECC RAM, 146GB HDD, RAID controller 5 DVD multi burner for data backup. Installed Windows server 2008 R2 as a Server operating system with Active Directory, DNS and File Server roles are deployed for Accounts storage, Internet Access and local shared resources.

[2] Source Information from IT

TMG server:[2]

HP desktop based machine with 3.0 GHz, 4GB DDR3 RAM, 500 GB HDD. Installed Windows server 2008 R2 running Threat Management Gateway application for secure internet access.

ZABDESK server:[3]

HP desktop based machine 3.0 GHz, 4GB DDR3 RAM, 500 GB HDD. Installed Windows server 2008 R2 running application and IIS roles for ERP based application access for faculty and students.

CMS server:[4]

HP desktop based machine 3.0 GHz, 4GB RAM, 500 GB HDD for data storage.

Installed Windows server 2008 R2 running ERP based application with Application and IIS roles with SQL Server 2008 R2 for ERP. One machine is rack mounted and three machines are tower based behind TMG Proxy firewall.

Standard 7-2 Library Collection and Staff Resources

At SZABIST Hyderabad, we have one library on the 4th floor of state life building which is well furnished with necessary resources including personnel and learning material. Two full time staff members are dedicated to provide continuous support to students and faculty on each working day in the library.

Library Staff Timings

Shifts	Timings	Personnel
Morning	8:00 am to 4:00 pm	1
Evening	1:00 pm to 9:00 pm	1

Library Resources of Hyderabad Campus in 2015

#	Particulars	Quantity
1	***Printed Form***	
	A. Books	**2162**
	Management Sciences	845
	Computer Sciences	490
	Social Science	349
	Law	67
	General/Mixed	411
	B. Reports	**30**
	Project	15
	Thesis	15
	C. Journal/Magazines (Subscribed)	27
	D. Newspapers (Daily)	03
2	***Digital Form***	**2565**
	A. E-Books	2000
	B. CD's (Books Related)	200
	C. Journal/Magazines (Online)	00
	D. E-Journals	365

Standard 7-3 Classrooms and Offices

Classrooms are equipped with multimedia projectors, PCs with active internet connections and ACs. Visiting faculty room is fully furnished with comfortable couches, reading tables, split AC, wooden shelf and an internet connected PC. Permanent faculty offices have latest Intel based computers with LCD monitors and internet facility, separate landline extensions, whiteboards, wooden shelves and lockers along with a network shared printer.

Total Number of Labs, Offices, Classrooms and Equipment

#	Items	Total	Remarks
1	Classrooms	12	09 classes on 4th Floor & 03 classes on 3rd Floor
2	Labs	02	01 on 4th Floor as Physics Lab & 01 on 3rd Floor as Network Lab
3	Computing Labs	03	02 on 4th Floor & 01 on 3rd Floor
4	Total Computers	125	115 Desktop Systems & 10 Laptop Computers
5	Visiting Faculty Room	01	On 4th Floor
6	Permanent Faculty Offices	25	22 Cubicles & 03 offices all on 4th Floor
7	Total Printers	06	01 color & 05 black and white laser printers
8	Total Projectors	14	
9	Total Scanners	02	

Criterion: 8

Institutional Support

Standard 8-1	**Support and Financial Resources**
Standard 8-2	**Number & Quality of Graduated Students**
Standard 8-3	**Financial Support for Library & Computing Facilities**

Standard 8 Institutional Support

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

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

2) 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.

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

4) 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 5 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 based 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 Graduated Students, Research Assistants and Ph.D. Students

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

Number of Graduate students

Particulars	No. of Students		
	2011	**2012**	**2013**
Graduates	NA[2]	NA	NA
Total Number of Faculty[3]	NA	NA	NA
Graduate Student / Faculty Ratio	**NA**	**NA**	**NA**

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

	2011	**2012**	**2013**
Graduate Student / Faculty Ratio	NA	NA	NA

[3] Adjunct faculty was divided by 3 and then added to total number of faculty.
2 As first batch will be graduating in this year i.e. 2015 so graduating information is not applicable

Number of Faculty

Particulars	Faculty			
	2011	**2012**	**2013**	**2014**
Total Number of Faculty	**08**	**10**	**11**	**17**
Full Time Computer Science	05	04	06	09
Visiting Faculty Computer Science	03	06	05	08

Standard 8-3 Financial Support for Library and Computer Science Facilities

a. Describe the resources available for computing facilities

Particulars	Budgetary Allocation			
	2011	**2012**	**2013**	**2014**
Computing Facilities	4,203,663/-	3,937,000/-	700,000/-	1,665,000/-

b. Describe the resources available for laboratories

Particulars	Budgetary Allocation			
	2011	**2012**	**2013**	**2014**
Laboratories/Physics Lab	-	-	-	266,800/-

c. Describe the resources available for the library

Particulars	Budgetary Allocation			
	2011	**2012**	**2013**	**2014**
Library	1,000,000/-	500,000/-	500,000/-	500,000/-

Source of information is: HR Manager, Financial Controller, Library In-charge, and Academic Controller

Appendix: B

Faculty Resume Forms

Name :	**Prof. Dr. AIJAZ AHMED SIDDIQUI**
Personal:	Father's Name: Atiq Ahmed Siddiqui Nationality: Pakistani Marital Status: Married Address: House No.315 A-II, Block-E, Unit No.09, Latifabad, Hyderabad, Sindh, Pakistan. Mobile no: +923332621749 E-mail draijazsiddiqui@yahoo.com
Experience:	**SZABIST, Hyderabad:** Position Held: Faculty Member in Department of Computer Science & Mathematics. Tenure: August 2013 to Date **Government Degree College & Post Graduate Center, Hyderabad:** Position Held: Principal Government Degree College & Post Graduate Center. Tenure: March 2013 to July 2013 **Government Degree College & Post Graduate Center, Hyderabad:** Position Held: Professor (BPS-20) Department of Mathematics. Tenure: March 2013 to July 2013. **University of East, Hyderabad:** Position Held: Visiting Faculty Member in Department of Computer Science & Mathematics. Tenure: 2007 to 2009 **Government Degree College & Post Graduate Center, Hyderabad:** Position Held: Associate Professor (BPS-19) and Head of Department of Mathematics. Tenure: 2003 to 2013. **Institute of Mathematics and Computer Science, University of Sindh, Jamshoro:** Position Held: Member of Board of Studies Tenure: 2001 to 2003. **Government Degree College & Post Graduate Center, Hyderabad:** Position Held: Assistant Professor (BPS-18) Department of Mathematics. Tenure: 1995 to 2002. (Resumed Duties after completing PhD)

	<u>Government Degree College & Post Graduate Center, Hyderabad</u>: Position Held: Lecturer (BPS-17) Department of Mathematics. Tenure: 1988 to 1991. (Left for PhD) **<u>Government Degree College, Kotri, Dadu</u>:** Position Held: Lecturer (BPS-17) Department of Mathematics. Tenure: 1984 to 1988. **<u>Government S. M College, Tando Allahyar</u>:** Position Held: Lecturer (BPS-17) Department of Mathematics. Tenure: 1981 to 1984. **<u>Government College Sujawal, Thatta</u>:** Position Held: Lecturer (BPS-17) Department of Mathematics. Tenure: 1980 to 1981. **<u>Government Degree College, Jacobabad</u>:** Position Held: Lecturer (BPS-17) Department of Mathematics. Tenure: 1979 to 1980. **<u>Pakistan Navy Boys Secondary School, Karachi</u>:** Position Held: Mathematics Teacher**.** Tenure: 1979 to 1981. **<u>Public School, Hyderabad</u>:** Position Held: Mathematics Teacher. Tenure: 1975 to 1977
Honors and Awards	Central overseas Scholarship (COT) IN 1991 for Ph.D.
Memberships	Co-translator , co-author in Sindh text book board
Graduate Students **Postdocs** **Undergraduate Students** **Honor Students**	N/A
Service Activity	Head Examiner , Moderator, Paper Setter in the University of Sindh Jamshoro, as well as in BISE Hyderabad and Head of Vigilance committee/retotaling committee etc. in BISE Hyd.
Brief Statement of	Higher- order boundary values problems

Research Interest	
Publications	➢ Research Paper published in University of Sindh Research Journal (Science series) Vol. 34-A, June 2002. ➢ Co-author of Text Book Mathematics for class-IX/X published by Sindh Text Book Board, Jamshoro. ➢ Writing Research Paper "Tenth Order Eigen Value Problems" (yet to be completed).

<table>
<tr><td>Name :</td><td>Dr. Khizer Hayat Khuhawar</td></tr>
<tr><td>Personal:</td><td>Plot # A-29, Village Muhammad Bux Shoro, Near Shahnai Marriage Garden, Jamshoro Road, East Qasimabad, Hyderabad</td></tr>
<tr><td>Experience:</td><td>7th, January 2015, Assistant Professor, Management Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), Hyderabad Campus.
5th August 1999 to September 2010, Principal/Admin Officer, Green Valley High School, Abdullah Town, Qasimabad, Hyderabad, Sindh, Pakistan.</td></tr>
<tr><td>Honors and Awards</td><td>Beijing, Government Scholarship for pursuing PhD., Participated in several software competitions(During Study), specially participated in Software Competition arranged by Dr. A.Q. Khan Scientific and Research Laboratory Kahuta.</td></tr>
<tr><td>Memberships</td><td>Chairman, Sindh Greener’s Education Society, Sindh, Pakistan
Member of The World Summit on the Information Society Forum</td></tr>
<tr><td>Graduate Students
Postdocs
Undergraduate Students
Honor Students</td><td>List supervision of graduate students, postdocs and undergraduate honors theses showing:
<table>
<tr><th>Years</th><th>Degree</th><th>Thesis Title</th><th>Name Students</th></tr>
<tr><td>2015</td><td>MBA</td><td>Using Technology as a Tool to Reduce Poverty and Economic Growth in Developing Countries: A Case of Pakistan</td><td>Niaz Ali Ujjan</td></tr>
<tr><td>2015</td><td>MBA</td><td>Microcredit Strategy for Women Empowerment and Poverty Reduction: A case of Pakistan</td><td>Rida Mustafa, Arbab Mohsin, Innas Qureshi</td></tr>
</table></td></tr>
<tr><td>Service Activity</td><td>Participant and Volunteer (During Study) in All Pakistan A.L Shaikh Software Competition, arranged by IMCS University Of Sindh Jamshoro,</td></tr>
<tr><td>Brief Statement of Research Interest</td><td>Management, Information and Communication Technology (ICT), Poverty Reduction Policies using ICT, Information Management and Resources. Rural Development and</td></tr>
<tr><td>Publications</td><td>1. Common currency for Asia “now or never” Economic Modeling, Volume 35, September 2013, Pages 170–174
2. Crush The Poverty By Information And Communication Technology, International Journal Of</td></tr>
</table>

	Scientific & Technology Research Volume 3, Issue 4, April 2014, Pages 250-256 3. **Go left or right-dilemma which China telecommunications industry reforms are facing?** Journal of Chemical and Pharmaceutical Research, 2014, 6(6):119-124 4. **Analysis of Exogenous Factors Affecting TFP Growth of China's Telecom Industry,** Applied Mechanics and Materials, http://www.scientific.net/AMM.687-691.4597 5. **Research on Integrated Information Service of Telecom Operators in EVC,** Applied Mechanics and Materials, http://www.scientific.net/AMM.687-691.3857
Research Grants and Contracts	1st Sept: 2011, Beijing, Government Scholarship Total Award Amount = (RS:1920000) up to 31st July 2014 1st March 2012, Beijing University of Posts and Telecommunications (BUPT) China = (RS:576000), up to 31st July 2014
Other Research or Creative Accomplishments	none
Selected Professional presentations	Lectures/ presentations conducted during Doctorial study to the Junior Chinese and other International Students at Beijing University of Posts and Telecommunications (BUPT) and Beijing Language University (BLU), Beijing, China

Name:	**Dr. Amir Hassan Pathan**
Personal:	***House # C/12-913, Khai Road, near Saim Clinic, Hyderabad – Pakistan*** ☎ 0300-2457749 🖃 dr.amirpathan@gmail.com
Experience:	Professor Computer Science Department (2012- to date) Shaheed Zulfikar Ali Bhutto Institute of Science & Technology Site Manager Information Systems & Technology Department (2010- 2012) State Bank of Pakistan Additional Director Information Systems & Technology Dept. (2000-2010) State Bank of Pakistan Joint Director Information Systems & Technology Department (1994-2000) State Bank of Pakistan Assistant Professor Institute of Information Technology (1989-1994) Sind University, jamshoro, Pakistan Lecturer Institute of Information Technology (1975-1989) Sind University, jamshoro, Pakistan
Honors and Awards	1. Vice Chancellor's Silver Medal 2. Central Overseas Training Scholarship (COT) of the Government of Pakistan for PhD program from UK
Memberships	**1.** LIFE MEMBER of "The Graduates Association" of the Stratchlyde University, Glasgow, Scotland, UK. **2.** LIFE MEMBER of "The Pakistan Physical Society", Islamabad, Pakistan. **3.** LIFE MEMBER of "The Pakistan Institute of Physics" Lahore, Pakistan **4.** MEMBER of the Steering Committee of the Economic Affairs, Ministry of Finance & Economic Affairs, Government of Pakistan, Islamabad for the Project "Strengthening the Institutional Capacity of the Economic Affairs Division for Aid and Debt Management System". **5.** MEMBER Central Executive Committee "Pakistan Youth Hostel Association", Islamabad **6.** MEMBEr Board of Trustees "Mehran University of Engineering & Technology" Endowment Fund, Ministry of Science & Technology, Government of Pakistan, Islamabad. **7.** MEMBER, UGC Curriculum Review Committee, Karachi. **8.** MEMBER, Governing Body, Shaheed Zulfikar Ali Bhutto Institute of Science & Technology (SZABIST) Karachi. **9.** MEMBER, Experts Committee for Computer Lab, Government Science College, Malir Cant Karachi. **10.** MEMBER, Technical Committee, Networking and Computerization Project, Federal Urdu University of Arts, Science and Technology, Karachi **11**. MEMBER, Board of Studies Mehran University of Engineering &

	Technology, Jamshoro **12**. MEMBER, Board of Governors, Institute of Business & Technology (Bizte Karachi **13**. MEMBER, Board of Governors, Indus University Karachi **14.** MEMBER Board of Studies, Institute of Business Management, Karachi **15.** MEMBER Board of Studies, Sukker Institute of Business Administration, Sukkur **16.** MEMBER Board of Studies, Isra University, Hyderabad **17.** MEMBER Board of Studies, BIZTECH, Karachi **18.** Examiner, Institute of Management Sciences, Bahawaddin Zakria University, Multan. **19.** Head Examiner, Institute of Bankers of Pakistan, Karachi
Graduate Students **Postdocs** **Undergraduate Students** **Honor Students**	NIL
Service Activity	**Nineteen years** teaching and research experience in the University of Sind Jamshoro. **Eighteen years** practical/field experience of working on the Automation Projects of Information Systems of the State Bank of Pakistan (The Central Bank). The service activity of this job was focused on the computer-based training to the officers of the Bank and research and development programs towards the automation of the Central Bank. After my retirement from SBP in 2010, I also worked as a site Manager DRS Data Center of SBP on contract basis from 2010 to 2012. Presently, I am working as a Professor in Computer Science in SZABIST Hyderabad.
Brief Statement of Research Interest	Nineteen years teaching and research experience in the field of Communication and Computer Technology, which includes six years research experience in the field of Telecommunication Engineering at the Strathclyde University, Glasgow, Scotland United Kingdom**.**
Publications	1. "SOME OVERLOAD CONTROL MODELS FOR PROCESSOR CONTROLLED SYSTEMS" Ph.D. Thesis submitted to the Department of Electronics & Electrical Engineering, Strathclyde University, Glasgow, Scotland (UK), 1987. 2. "STORED PROGRAM CONTROL (SPC) TELEPHONE EXCHANGES" Gomal University Journal of Research, Vol-10, No. 3 (1990), pp.229-241, D.I. Khan – Pakistan, 8 – 10 May, 1990. 3. "OVERLOAD CONTROL MODELS FOR THE STORED PROGRAM CONTROL (SPC) TELEPHONE EXCHANGES." The Pakistan Institute of Physics Annual Conference, Punjab University, Lahore, Pakistan, 1992 4. "OPTIMAL CONTROL MODELS WITH ADDITIVE COST CONSTRAINTS TO INCREASE THE EFFICIENCY OF A STORED PROGRAM CONTROL (SPC) SYSTEM", Sind University Research Journal, Jamshoro, SCI

SR, vol. 25 (1993).

5. "PHYSICAL LAYER PROTOCOL FOR FACTORY AUTOMATION" Sind University Research Journal, Jamshoro, SCI SR, vol.25 (1993)
6. "OPTIMAL CONTROL MODEL IN VIEW OF VARIOUS QUEUE DISCIPLINES" MUET Research Journal of Engineering & Technology, Jamshoro, Pakistan, July 1994.
7. "Central Asian Academic Research Network (CAARN)", IEEEP Journal, November 1995, Karachi Pakistan.
8. "To Study the Radio Communication System of the Radio Pakistan, Hyderabad, Pakistan. Baluchistan University Research Journal, Quetta, Pakistan, vol. 1, 1999
9. "Implementation Procedure for a Finger print based Matching and Authentication system using Filter Bank for E-Commerce Applications Quaid-e-Awam University Research Journal of Engineering, Science and Technology, No.1 Volume 5, Jan-June 2004.
10. "Secure Network Model for Management Information System based on IP Security(IPSEC) encryption using multilayer approach of Network Security", International Conference on Information and Communion Technologies (ICICT),IBA, 27-28 August 2005, Karachi
11. Performance Analysis of Bessel Beam-former in AWGN Channel Model Using Digital Modulation Technique", Research Journal of Applied Sciences, Engineering and Technology 4(21): 4408-4416, 2012, ISSN: 2040-7467, Maxwell Scientific Organization 2012.
12. Performance Analysis of Bessel Beam-Former in Rayleigh Fading channel Model using Digital Modulation Technique", Australian Journal of Electrical and Electronics Engineering, Vol-09 No 3, Institution of Engineers, Australia 2012.
13. Hand Gesture Recognition Based on Digital Image Processing using Matlab, 1st International Conference on Sensing for Industry, Control, Communication & Security Technologies, ICSICCST-2013, held on June 24, 2013 t H.E.J, University of Karachi, Pakistan.
14. Implementation of Blind Beam forming Algorithms on Adaptive Antenna Array in Rayleigh Fading Channel Model, 1st International Conference on Sensing for Industry, Control, Communication & Security Technologies, ICSICCST-2013, held on June 24, 2013 t H.E.J, University of Karachi, Pakistan.
15. "Input Buffer Limitation (IBL) Strategy for the Stored Program Control (SPC) Telephone Exchange (To be published)

Research Grants and Contracts	NIL
Other Research or Creative Accomplishments	• I wrote my PhD thesis under the title of "Some Overload Control Models for Processor Controlled Systems". I got experience on many Main, Mini and Microcomputers such as ICL-1904S, Honeywell, IBM 360/370 and VAX/VMS Machines in a fully networked environment. • I also acquired a wide knowledge of "BASIC", "ALGOL 60" and "FORTRAN" languages, and know-how of many computer software packages such as "Elliot Simulation Package" (ESP), Numerical Algorithmic Group (NAG) sub-routines, Ghost & Gino graphic packages, Windows, and MS-Office. Following are some areas of my research work: 1. Management Information System. 1. Satellite Communication. 2. Computer Communication Networks. 3. Telecommunication Networks. 4. Telecommunication Engineering. 5. Teletraffic Engineering.
Selected Professional presentations	1. First National Conference on Electronics, Feb 1979, Islamabad 2. Second National Conference on Electronics, April 1979, Islamabad. 3. Seminar on Tele-Traffic Problems, May 1986, Glasgow, UK 4. Course on Basic Telecommunication Science, Jan-Feb 1989, Trieste, Italy 5. National Conference on Recent Advance in Physics and Applications, May 1990, Gomal University, D.I. Khan 6. Third Symposium on Frontiers in Physics, Nov 1990, Quaid-e-Azam University, Islamabad 7. Pakistan Institute of Physics Annual Conference, March 1991, Punjab University, Lahore 8. International Conference on Teaching of Physics., June 1991, Karachi University, Karachi 9. The Pakistan Institute of Physics Annual Conference, April 1993, Punjab University, Lahore 10. The Institute of Electrical and Electronics Engineers, Pakistan. (IEEEP), November 1995, Karachi 11. MIS Seminar, June 1996, College of Business Management (CBM), Karachi 12. Workshop on University-Industry Interaction in Pakistan, April 2000, University Grants Commission, Karachi 13. Computer Science Seminar- Information Technology in Banks, Sept 2003, Mohammad Ali Jinnah University, Karachi 14. IT-HRD Gapes, Current Scenarios, Conference on "Finding IT-

	HRD Gapes and IT Training for Students and Jobless Graduates", Dept. of Information Technology, Government of Sind and E-Cube, October 2003 15. Change Management Conference, 2003, State Bank of Pakistan, Karachi 16. 47th International Youth Hostel Federation Conference, May 2008, Cairo, Egypt 17. 1st International Conference on Sensing for Industry, Control, Communication & Security Technologies, ICSICCST-2013, held on June 24, 2013 t H.E.J, University of Karachi, Pakistan.

Faculty Resume

Name :	Saira Muzafar
Personal:	A-89 Qasim-Nagar, Qasimabad, Hyderabad. 03123515499
Experience:	On 01-01-14 I was appointed as BS Computer science Lecturer at Szabist Hyderabad. On 20-07-13 I was appointed as Junior software Developer at Indasy IT Solutions Hyderabad.
Honors and Awards	I was promoted to managing developer position at Indasy IT Solutions after fours month of working as Junior Developer.
Memberships	IEEE Membership
Graduate Students Postdocs	I've supervised the project of Voting System

Undergraduate Students **Honor Students**	2014 **BSCS** **Voting System** And currently I am supervising two groups: **2015 BSCS Examination Attendance System** 2015 BSCS Agriculture Management System
Service Activity	Student Motivation Event Management etc.
Brief Statement of Research Interest	Nowadays I'm more interested towards the research in few domains like WSNs and Artificial Intelligence. And working on few tools to produce some desired results and in hurry to get my work published.
Publications	Conference Poster paper publication In WSN4DC'13 The 1st International conference on Wireless sensor Networks for Developing Countries. Jamshoro, Pakistan

Research Grants and Contracts	NA
Other Research or Creative Accomplishments	I have developed many commercial software's like: E-Marketing System Human Resource Management System Order Management System School Management System

	Moodle Configuration etc.
Selected Professional presentations	NA

<table>
<tr><td>Name :</td><td>Sumbul Ghulamani</td></tr>
<tr><td>Personal:</td><td>Street # 1, Bunglow # A-2, Mubarak Housing Society, Hyderabad
+92 336 3959863</td></tr>
<tr><td>Experience:</td><td>
<table>
<tr><td>Assistant Professor</td><td>SZABIST Hyderabad</td><td>8th Jan, 2015 - tillDate</td></tr>
<tr><td>Assistant Professor</td><td>Isra University, Hyderabad</td><td>3rd Dec, 2008 - 31st Dec, 2014</td></tr>
<tr><td>Lecturer</td><td>Isra University, Hyderabad</td><td>1st March, 2006 - 2nd Dec, 2008</td></tr>
<tr><td>Student Teaching Assistant</td><td>Isra University, Hyderabad</td><td>11th April 2005 – 15th October, 2005</td></tr>
</table>
</td></tr>
<tr><td>Honors and Awards</td><td>

Certificate of Appreciation for successfully organizing “Isra Co-Curricular Activities Spring 2008”, by Dean of Faculty of Computer Science.
Merit based scholarship for MCS by Endowment Fund, Education & Literacy Department, and Govt. of Sindh, Pakistan.
Certificate of Appreciation for successfully organizing “Isra Co-Curricular Activities 2005”, by Dean of Faculty of Computer Science.
Merit based scholarships for Bachelors by Aga Khan Education Service, Pakistan.
Secured Second position in Quiz Competition, Isra University.
Certificates of Merit by Aga Khan Local Education Board for Hyderabad

</td></tr>
<tr><td>Memberships</td><td>-</td></tr>
<tr><td>Graduate Students
Postdocs
Undergraduate Students
Honor Students</td><td>
<table>
<tr><th>Year</th><th>Degree</th><th>Name</th></tr>
<tr><td>2014</td><td>BS(ICT)</td><td>Real State Agency</td></tr>
<tr><td>2013</td><td>BS(SE)</td><td>Smart Text Entry</td></tr>
<tr><td>2013</td><td>BS(CS)</td><td>Inventory Management System</td></tr>
<tr><td>2012</td><td>BS(SE)</td><td>Kids tutorial</td></tr>
<tr><td>2011</td><td>BS(CS)</td><td>Quran Web Portal</td></tr>
<tr><td>2010</td><td>BS(CS)</td><td>Isra University Online</td></tr>
</table>
</td></tr>
<tr><td>Service Activity</td><td>Worked as director, Aga Khan Planning & Building Services, Pakistan</td></tr>
<tr><td></td><td>It is an era of technology, especially the world is moving to</td></tr>
</table>

Brief Statement of Research Interest	automation in all aspects of life. It is such technology that is involved in all dimensions of our life. Since, I am a graduate of Computers Science & I have my research work related to it; therefore, I would like to involve myself to the work which is more towards IT applications and problems & solutions of our daily life. Among various fields of research in computer science, I am interested in Human Computer Interaction (HCI), more specifically, working with Game Based Learning (GBL).
Publications	▪ **A Compression Prototype for Urdu Digital Library** International Research Conference, 27th & 28th October 2008 at Holiday Inn Lahore. ▪ **Steganography: A new Horizon for Safe Communication Through XML** Journal of Theoretical and Applied Information Technology, March 08, vol.4 No. 3, pp. 187-202 ▪ **Zoomable User Interface for Navigating WWW** HCI International 2007, accepted as a Poster Paper, Presented on 22-27 July, 2007 at Beijing, China ▪ **Analysis of Traffic Load on Low Bit Rate Channel Using Variable Bit Rates** New Horizons Journal of Institute of Electrical & Electronics Engineers, Pakistan vol. 55 Jan-Mar, 07 pp. 13 – 17 ▪ **Character Order Models in Sindhi Language & Their Exploitation in Compression Techniques** Shaikh Ayaz Conference on Language and Literature 2007, 10 January 2007, in Press ▪ **Alternate Paradigm for Navigating WWW Through Zoomable User Interface** Advances and Innovation in Systems, Computing Sciences and Software engineering concepts by Springer 2007, vol. 1, pp. 417-420 ▪ **Traffic Load Analysis for Low Capacity Channels for Rural Telephony** 8th National Research Conference, 9th December 2006 at SZABIST Karachi

Name :	**Muhammad Ahsan Memon**
Personal:	Cell: +92-334-2627092 Email: ahsan_muet@live.com
Experience:	Three Months (Lecturer, BSCS, SZABIST)
Honors and Awards	– Erasmus Mundus Scholar 2013 (Wroclaw University of Technology, Poland) – Best Internship Award, IEEE Karachi Section, 2012
Memberships	– Institute of Electrical and Electronic Engineers (2012 – Present) – Junior Chamber International, Rainbow, Pakistan, (2013) – Youth Parliament (2012 – 2013) – Mehran University Student's Team (2011-2013)
Graduate Students **Postdocs** **Undergraduate Students** **Honor Students**	N/A
Service Activity	Founder, Connect Campaign: A campaign for equalizing the research and innovation capabilities within students and faculty. Co-Founder, DEWSNet Pakistan
Brief Statement of Research Interest	Wireless Sensor Networks – Multiple Access Schemes – Localization Antenna – Line Fed Microstrip Patch Antenna
Publications	– Security Issues in Sensor Networks and Countermeasures ***(IGI Global, Book Chapter)*** – Parametric Variation Based Studies and effective Design of Rectangular Patch Antenna for Bluetooth Application. ***(IJCER, Journal Paper)*** – Autonomous UAV based Wireless Sensor Network ***(Poster Paper – International Conference)***

Name :	**Sunny Kumar Gemnani**
Personal:	Flat # 11 Golden Sand Apartment 2 Near Ali CNG Qasimabad Hyderabad +923332683022
Experience:	• Working as Lecturer / PM in CS Department SZABIST Hyd. Jan 2014 To Current • Worked as RF Engineer in KOI Group Melbourne Australia May 2011 to Feb 2013 • Worked as RF Executive in Telenor Pakistan Sept 2007 To Feb 2011
Honors and Awards	Australian Endeavour Scholarship Holder
Memberships	Member with Pakistan Engineering Council
Graduate Students **Postdocs** **Undergraduate Students** **Honor Students**	None
Service Activity	None
Brief Statement of Research Interest	I am inclined towards security aspects wireless networks. Currently I am working on Spoofing Techniques in WSN as part of Master's Thesis Work
Publications	Participated in Poster Competition at IMTIC 2015 MUET Jamshoro with caption of Reshaping Education With Augmented Reality
Research Grants and Contracts	None
Other Research or Creative Accomplishments	None
	None

Selected Professional presentations	

Name :	**Umair Jamil Ahmad**
Personal:	• House # B-18, Phase-1, Gulshan-e-Bakhtawar, Qasimabad, Hyderabad. • Phone: 022-2656441 • Mobile: 0343-2030686 • Email: umair.qureshi@hyd.szabist.edu.pk
Experience:	• 1st January 2015, Lecturer (Computer Science), Shaheed Zulfikar Ali Bhutto Institute of Science & Technology Hyderabad. (hyd.szabist.edu.pk) • 1st January 2007, Lecturer (Information Technology), Hyderabad Institute of Arts, Science & Technology Hyderabad. (hiast.edu.pk)
Honors and Awards	None
Memberships	• The Indus Entrepreneurs • IEEE • ACM
Graduate Students **Postdocs** **Undergraduate Students** **Honor Students**	None
Service Activity	• Conducted Linux System Administration and End User trainings for Pakistan Computer Bureau Islamabad at Hyderabad • Volunteer Training Sessions • Classroom Organization and Management • Resource Management and Policy Implementation • Student Counseling and Motivation • Course Planning and Development • Activity Planning • Co-founded Ximetodi, a nonprofit study group for students
Brief Statement of Research Interest	I am fascinated by the field of software engineering concepts specially the areas of requirement engineering and software project management. I am interested in the process of requirement elicitation, analysis and tracing techniques, starting from client interactions, leading to developing specifications, and tracing the product features back to the original client requirements.

Publications	None
Research Grants and Contracts	None
Other Research or Creative Accomplishments	None
Selected Professional presentations	None

SZABIST

SELF ASSESSMENT REPORT

BS Computer Science

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. Table 4.1 program objectives assessment	Yes		
	b. Document institution, college, and program mission statements	Yes		
	c. State program objectives	Yes		
	d. Describe how each objective is aligned with program, college, and institution mission statements	Yes		
	e. Outline the main elements of the strategic plan to achieve the program mission and objectives	Yes		
Standard 1-2	Program Outcomes			
	a. Table 4.2 outcomes versus objectives	Yes		
	b. Employer survey	Yes		
	c. Alumni survey	Yes		
	d. Graduating student's survey	Yes		
Standard 1-3	Assessment Results And Improvement Plans			
	a. Describe the action taken on based on the periodic assessments	Yes		
	b. Describe major future program improvement plans based on recent assessments	Yes		
	c. List strengths and weaknesses of the programs	Yes		
	d. List significant future plans for the program	Yes		
Standard 1- 4	Overall Performance Using Quantifiable Measures			
	a. Indicate the percentage of successful students during study years showing i.e. their average, graduating grade point average per semester, time required to complete the program, drop out ratio of students	Yes		
	b. Employer's survey (to assess the performance of the department graduates)	Yes		
	c. Percentage of Student Evaluation/Assessment results for all the courses and faculty	Yes		
	d. Percentage of research activities i.e. journal publications, funded projects, conference publications per faculty and per year, and the faculty awarded excellence in research	Yes		
	e. Number of short courses workshops, seminars organized on community service level	Yes		
	f. Faculty and student surveys results to measure the administrative services provided	Yes		
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. Table 4.3 curriculum course requirement	Yes		
	b. Table 4.4 Courses versus Outcomes	Yes		
Standard 2-2	Theory, Problem Analysis/ Solution and Design in Program			
	a. Table 4.5 Standard 2-2 requirements	Yes		
Standard 2-3	Mathematics & Basic Sciences Requirements			
	a. Address standards 2-3, 2-4, and 2-5 using information required in Table 4.4	Yes		
Standard 2-4	Major Requirements as Specified by Accreditation Body	Yes		
Standard 2-5	Humanities. Social Sciences, Arts, Ethical. Professional & Other Requirements			
	a. Address standards 2-3, 2-4, and 2-5 using information required in Table 4.4	Yes		
Standard 2-6	Information Technology Content Integration Throughout the Program			
	a. Indicate the courses within the program that will satisfy the standard	Yes		
	b. Describe how they are applied and integrated throughout the program	Yes		
Standard 2-7	Communication Skills (Oral & Written)			
	a. Indicate the courses within the program that will satisfy the standard	Yes		
	b. Describe how they are applied	Yes		
	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	Yes		
	b. Benchmark with similar departments in reputable institutions to identify shortcomings in laboratory	Yes		
Standard 3- 2	Adequate Support Personnel for Labs			
	a. Indicate for each laboratory, support personnel, level of support, nature and extent of instructional support	Yes		
Standard 3- 3	Adequate Computing Infrastructure and Facilities			
	a. Describe how the computing facilities support the computing component of your program	Yes		
	b. Benchmark with similar departments in reputable institutions to identify shortcomings in computing infrastructure and facilities, if any	Yes		
	Criterion 4 – Student Support and Advising			
Standard 4-1	Sufficient Frequency of Course Offering			
	a. Provide the department's strategy for course offerings	Yes		
	b. Explain how often required courses are offered	Yes		

	c. Explain how often elective courses are offered	Yes		
	d. Explain how required courses outside the department are managed to be offered in sufficient number and frequency	Yes		
Standard 4-2	Effective Faculty / Student Interaction			
	a. 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	Yes		
Standard 4-3	Professional Advising and Counseling			
	a. Describe how students are informed about program requirements	Yes		
	b. Describe the advising system and indicate how its effectiveness is measured	Yes		
	c. Describe the student counseling system and how students get professional counseling when needed	Yes		
	d. Indicate if students have access to professional counseling; when necessary	Yes		
	e. Describe opportunities available for students to interact with practitioners, and to have membership in technical and professional societies	Yes		
	Criterion 5 – Process Control			
Standard 5-1	Admission Process			
	a. Describe the program admission criteria at the institutional level, faculty or department if applicable	Yes		
	b. Describe policy regarding program/credit transfer	Yes		
	c. Indicate how frequently the admission criteria are evaluated and if the evaluated results are used to improve the process	Yes		
Standard 5-2	Registration and Students			
	a. Describe how students are registered in the program	Yes		
	b. Describe how students' academic progress is monitored and how their program of study is verified to adhere to the degree requirements	Yes		
	c. Indicate how frequently the process of registration and monitoring are evaluated and if the evaluation results are used to improve the process	Yes		
Standard 5-3	Faculty Recruitment and Retention Process			
	a. Describe the process used to ensure that highly qualified faculty is recruited to the program	Yes		
	b. Indicate methods used to retain excellent faculty members	Yes		
	c. Indicate how evaluation and promotion processes are in line with institution mission statement	Yes		
	d. Indicate how frequently this process is evaluated and if the evaluation results are used to improve the process	Yes		

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	Yes		
	b. Indicate how frequently this process is evaluated and if the evaluation results are used to improve the process	Yes		
Standard 5-5	Program Requirements Completion Process			
	a. Describe the procedure used to ensure that graduates meet the program requirements	Yes		
	b. Describe when this procedure is evaluated and whether the results of this evaluation are used to improve the process	Yes		
	Criterion 6 – Faculty			
Standard 6-1	Program Faculty Qualifications and Number			
	a. Faculty resumes in accordance with the format in Appendix B	Yes		
	b. Table 4.6 faculty distribution by program's areas	Yes		
Standard 6-2	Current Faculty, Scholarly Activities & 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	Yes		
	b. Describe the means for ensuring that full time faculty members have sufficient time for scholarly and professional development	Yes		
	c. Describe existing faculty development programs at the departmental and university level. Demonstrate their effectiveness in achieving faculty development	Yes		
	d. Indicate how frequently faculty programs are evaluated and if the evaluation results are used for improvement	Yes		
Standard 6-3	Faculty Motivation and Job Satisfaction			
	a. Describe programs and processes in place for faculty motivation	Yes		
	b. Obtain faculty input using faculty survey (Appendix C) on programs for faculty motivation and job satisfaction	Yes		
	c. Indicate how effective these programs are	Yes		
	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	Yes		
	b. Indicate how adequate the facilities are	Yes		
Standard 7-2	Library Collections & Staff			
	a. Describe the adequacy of library's technical	Yes		

	collection			
b. Describe the support rendered by the library	Yes			
Standard 7-3	Class-rooms & Offices Adequacy			
a. Describe the adequacy of the classrooms	Yes			
b. Describe the adequacy of faculty offices	Yes			
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	Yes			
b. Describe the level of adequacy of secretarial support, technical staff and office equipment	Yes			
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	Yes			
b. Provide the faculty: graduate student ratio for the last three years	Yes			
Standard 8-3	Financial Support for Library and Computing Facilities			
a. Describe the resources available for the library	Yes			
b. Describe the resources available for laboratories	N/A			
c. Describe the resources available for computing facilities	Yes			

***Key**

Y- Yes

N- No

N/A- Not Applicabl

SZABIST

HYDERABAD CAMPUS
SELF ASSESSMENT REPORT

BS Computer Science

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. Amir Hassan Pathan

ii. Ms. Sumbul Ghulamani

iii. Ms. Saira Muzafar

2. Date of Nomination

The Date of Nomination was 28th April 2015

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

1 month (11th May 2015 to 11th June 2015)

4. Name of Department and Program being assessed

The Department is Computer Science and the program being assessed is BSCS

5. Shortcomings of the PT report

- The re-admission policy needs to be updated as per students Handbook
- In Criterion 2, standard 2-1-c, A few courses names needs to be renamed as they are offered in Szabist.
- In Criterion 2, Standards 2-1-f, the table Courses versus Outcomes, CSC4xxx core also meets objective 4

6. Comments on:

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

The criteria/standards mentioned in Program Team Report are pertinent to the standards provided in self-assessment manual.

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

The statistics provided in Program Team Report are authenticated and verified from respective authorities.

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

The summaries / conclusions stated by PT extracted from the feedbacks/surveys are absolutely adequate, providing the relevant information**.**

iv. **Observations made during the assessment**

It has been observed that the PT report is as per the HEC guidelines and all standards have been followed. There are few minor suggestions for further improvements as mentioned in Implementation Plan summary.

v. **Strengths and weaknesses of the Program**

Strengths: updated curriculum, technologically advanced courses along with practical implementation.

Weakness: Industry academia collaboration needs to be established.

vi. **Date of the presentation of AT report in the exit meeting**

4th June , 2015

B. Assessment Results Implementation Plan Summary-BSCS

AT Findings	Corrective Action	Implementation Date	Responsible Body	Resources Needed
1. Less research publications from faculty members	• It is recommended that there should be more emphasis on faculty to have publications i.e. at least 1 publication every 6 months per faculty • It is recommended that there should be a dedicated research lab equipped with upgraded hardware and software	June 2016	HR officer and Head of campus	None
2. Teaching methodology can be improved	It is recommended that Workshop could be organized in order to give faculty members exposure to the new teaching trends	June 2016	Head of campus, HR officer and Program managers	Budgetary Allocation
3. Faculty Development Programs	It is recommended that FDPs can be organized in collaboration with HEC	June 2016	HR officer and Head of campus	Budget for faculty training and development
4. Basic courses are needed for the students at initial stage, that can enhance their capabilities to meet the needs of core courses	It is recommended that Foundation classes could be initiated prior to the first semester	June 2016	Head of campus, Program manager & faculty	Budgetary Allocation

President's Comments: It is worth mentioning that efforts are already being made to further improve the quality and standards of this program. Moreover, the department should ensure the steady implementation of all the identified corrective actions. I appreciate the efforts rendered by the Program Team, the Assessment Team, and the staff of the QEC for the preparation and completion of the Self-Assessment Report.

Name and Signature: Shahnaz W. Ali
June 11, 2015

Ms. Shahnaz Wazir Ali

Head of Campus Comments : Some of the observations (Like at S. No. 1) are already part of the faculty's performance measures and will be implemented by motivating them to enhance their contribution in research Area in stipulated time period, while the corrective actions suggested for other observations will also be implemented in due time with the availability of required resources. The commencement of program to enhance the quality of inducted candidates will also be implemented with the availability of required physical resources and necessary approval from the competent authorities in the coming period.

Name and Signature:

M. Jawad Raza Khoso

QEC Comments: The Self-Assessment process of BSCS program was significantly an onerous task but exhibits valuable explanations by the program team. By the implementation of the corrective actions proposed by assessment team, the effectiveness of the program can be heightened. These remarkable outcome are the results of continual support from Head of Campus, efforts of competent program team, proficient assessment team and the devoted IR/QEC staff.

Name and Signature:

Ms. Mahwash Imran Mahwash

Ms. Farzana Akmal

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?	5	4	3	2	1
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)	**29**				
Score 1 **(S1) = [TV/(No. of Questions *5)] *100 *Weight**		**4.83**				

Criterion 2 – Curriculum Design and Organization		**Weight = 0.05**				
Factors		**Score**				
1	Is the curriculum consistent?	5	4	3	2	1
2	Does the curriculum support the program's documented objectives?	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 general education, arts and professional and other discipline requirements as laid down by the respective / accreditation bodies / councils? (Refer to Appendix A of the Self Assessment Manual)	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)	**38**				
Score 2 **(S2) = [TV/(No. of Questions *5)] *100 *Weight**		**19**				

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)	**14**				
	Score 3 **(S3) = [TV/(No. of Questions *5)] *100 *Weight**	**9.3**				

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**	**8.6**				

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)	**51**				
	Score 5 **(S5) = [TV/(No. of Questions *5)] *100 *Weight**	**13.90**				
Criterion 6 – Faculty		**Weight = 0.20**				
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)	**28**				
	Score 6 **(S6) = [TV/(No. of Questions *5)] *100 *Weight**	**12**				

Criterion 7 – Institutional Facilities						Weight = 0.10
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)	**15**				
	Score 7 **(S7) = [TV/(No. of Questions *5)] *100 *Weight**	**15**				

Criterion 8 – Institutional Support						Weight = 0.10
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 Ph.D students?	5	4	3	2	1
	Total Encircled Value (TV)	**8**				
	Score 8 **(S8) = [TV/(No. of Questions *5)] *100 *Weight**	**12**				

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

= 94.74

SZABIST

Hyderabad Campus

Program Team Registration Forms

BS Computer Science

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Hyderabad Campus

Registration Form

Program Team

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

Team Leader: Suvary Kumar

Name: Suvary Kumar Position: Lecturer / PM

Institution: SZABIST Contact No: (Office) 021-2782242

Mobile No: 0333-2623022 Email Address: suvary.kumar@hyd.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.

3/3/2015

(Signature of PT Member) Date

03/3/15

Approved By: _____

(Head of the Department)

Note: Completed form should be sent to the QEC

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Hyderabad Campus

Registration Form

Program Team

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

Team Leader: SUNNY KUMAR

Name: UMAIR JAMIL AHMAD Position: LECTURER

Institution: SZABIST (Hyderabad) Contact No: (Office) 022-2782442

Mobile No: 0343-2030686 Email Address: umair.qureshi@hyd.szabist.edu.p

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.

Umair 2-March-2015

(Signature of PT Member) Date

03/3/15

Approved By: _____

(Head of the Department)

Note: Completed form should be sent to the QEC

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
Hyderabad Campus

Registration Form

Program Team

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

Team Leader: Sunny Kumar

Name: Ahsan Memon

Position: Lecturer

Institution: SZABIST, Hyd

Contact No: (Office) 2752442

Mobile No: +923342627092

Email Address: ahsan.memon@hyd.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) Date: 3/3/15

Approved By: 2. 03/3/15

(Head of the Department)

Note: Completed form should be sent to the QEC

SZABIST

Hyderabad Campus

Program Team Registration Forms

BS Computer Science

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
HYDERABAD Campus

Registration Form

Assessment Team

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

Team Leader: Dr. Amir Hassan Pathan

Name: Dr. Amir Hassan Pathan Position: Professor

Institution: SZABIST Hyderabad Contact No: (Office) 022-2782441-3

Mobile No: 0300-2457749. Email Address: amir.pathan@hyd.szabist.edu.p

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) 28 April 2015
Date

Approved By: _____

(Head of the QEC)

Note: Completed form should be sent to the QEC

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
HYDERABAD Campus

Registration Form

Assessment Team

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

Team Leader: Dr. Amin Hassan

Name: Saira Muzaffar

Position: lecturer (BSCS)

Institution: Szabist Hyderabad

Contact No: (Office) 02227802442

Mobile No: 03123515499

Email Address: sairamuzaffar@hyd.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)

28-04-2015

Date

Approved By: _____

(Head of the QEC)

Note: Completed form should be sent to the QEC

SHAHEED ZULFIKAR ALI BHUTTO
INSTITUTE OF SCIENCE AND TECHNOLOGY
HYDERABAD Campus

Registration Form

Assessment Team

Assessment Team of (Name of Department / Faculty): COMPUTER SCIENCE

Team Leader: DR AMIR HASSAN

Name: SUMBUL GHULAMANI

Position: ASSISTANT PROFESSOR

Institution: SZABIST HYDERABAD

Contact No: (Office) 022-2782442 ext 136

Mobile No: 0336-3959863

Email Address: sumbul.ghulamani@hyd.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)

28/April/2015

Date

Approved By: Jaeyal

(Head of the QEC)

Note: Completed form should be sent to the QEC