

# **SELF ASSESSMENT REPORT**

## **Department of Computer Science Shaheed Benazir Bhutto University Sheringal**



**Submitted to  
Quality Enhancement Cell  
Shaheed Benazir Bhutto University Sheringal**

### **Program Team Members**

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## **ACKNOWLEDGEMENTS**

The present report is the first self-assessment report written for the Department of Computer Science at Shaheed Benazir Bhutto University Sheringal, Dir Upper. The report represents the first step towards achieving Quality Assurance in higher education offered by the department. This report is a comprehensive campaign carried out by the department of Computer Sciences, under the guidelines of HEC Self-Assessment Manual.

In preparing the present report, we rely mainly on the templates of self-assessment manual issued by the Quality Enhancement Cell, Shaheed Benazir Bhutto University, Sheringal. The report includes in its first part a definitive introduction to the Program Mission, Objectives and Outcomes of the degree offered. The second part consists of the Curriculum Organization. After that, the report reviews the required criteria for the self-assessment and the related standards according to the specifications of SAR. We hope that we have been successful in writing of this report, and that we achieve the minimum requirements of SAR. Continuous improvement is a focus of our department and is done every day as a natural part of our profession. We strive always to improve processes that are weak and fix processes that are broken.

I am thankful to all faculty members who provided valuable information included in this report. I hope that this report will be used to identify the strengths and weaknesses in the program, which after all, is the main objective of this exercise. We further hope that all points of strengths would be further enhanced and corrective actions will be taken to improve the weaknesses.

In preparing of this report, I must acknowledge the contribution of Mr. Ibrar Hussain, Assistant Director QEC and the support provided by the Quality Enhancement Cell, Shaheed Benazir Bhutto University of Sheringal.

**Mr. Siraj Muhammad**  
**Chairman**  
**Department of Computer Science**  
**Shaheed BB University Sheringal Dir (U)**

## **INTRODUCTION**

The main purpose of the QEC is to use the yard sticks of Self-Assessment (SA) to improve the quality in different quarters of the academia. The basic theme in any SA activity is not only to accept the demerits and other weaknesses identified by the stakeholders but to improve the overall performance of the department.

The self-assessment is the part of Quality Enhancement. There are three parts of the Quality Enhancement Assessment. First the teachers themselves prepare the weekly plan and semester plan bifurcating the mid-term, semester breaks and final term examination including the assignments, quizzes, tests and class presentations. Secondly, the teaching quality assessment of faculty is carried out in two parts; one of them is completed by the student which is a continuous and repeated activity carried out in each semester before the final examination. The second part is carried out from the quality of papers and coverage of course. Third is the provision of facilities like research, library, net-work, laboratories, and computer facilities (institutional facilities and institutional support).

Under the umbrella of QEC, the Self-Assessment Program is being implemented in the departments of Environmental Sciences, Shaheed Benazir Bhutto University, Sheringal. This is a great step in improving students' learning and evaluating in compliance with academic and learning standards of HEC. The office of QEC has conducted seminars and meetings with Chairmen/ Program Team members and faculty members, to clear the vision of QEC in the context of Self-Assessment.

**CRITERION 1**  
**PROGRAM MISSION, OBJECTIVES AND OUTCOMES**

## **UNIVERSITY MISSION AND OBJECTIVES**

1. To enlighten the darkness of this remote area through education.
2. To preserve & conserve the “Natural Resources” of this area through human resource development.
3. To enlighten the youngsters, Girls & Boys with educational power to serve the nation in various fields.
4. To act as an “Intellectual Fort” against anti-state mentality through education.
5. To make the University one of the best institutes for learning and research

## **PROGRAM MISSION**

To educate and trains the students with current state-of-the-art concepts and technologies in order to produce high quality professional under-graduate to steer them in computer science and related fields for global challenges, while keeping in view the social, ethical and national norms.

<b>Standard 1-1: The program must have documented measurable objectives that support faculty / college and institution mission statements</b>
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1. To promote basic knowledge regarding mathematics, basic sciences, general sciences, core computer courses and technology oriented courses.
2. To equip the students with the knowledge to identify problems like manipulating data in data base, sending data over network.
3. To develop new problem-solving approaches those provide better computing solutions.
4. To provide students with good presentation and communication skills to cultivate adaptability for the work place and participation in society.
5. To provide students with an understanding and appreciation of the social consequences of technology, including computers, and of the ethical issues that may arise with new technologies.
6. To develop a foundation for continuing education that promotes professional advancement in the field of computer science.
7. To provide software development practices more than just the underlying principles of computer science.

**Standards1-2: The program must have documented outcome for graduating students .It must be demonstrated that the outcome support the program objective and that graduating students are capable of performing these outcomes.**

1. At the end of program the students should be able to identify problems and to create effective, efficient solutions using new technologies.
2. An ability to apply knowledge of computing and mathematics appropriate to the discipline.
3. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
4. An ability to use current techniques, skills, and tools necessary for computing practices
5. The student will learn to communicate effectively in career and in organization.
6. An understanding of professional, ethical, legal, security, and social issues and responsibilities.
7. Moreover the students have the ability to think critically in the various fields of computer science.

Program Objectives	Program Outcomes						
	1	2	3	4	5	6	7
<b>1</b>	√	√					
<b>2</b>		√					
<b>3</b>			√	√			
<b>4</b>					√		
<b>5</b>						√	
<b>6</b>					√		
<b>7</b>							√

**Standard 1-3: The results of programs assessment and the extent to which they are used to improve the program must be documented**

The assessment of graduating students' survey, have been conducted by the QEC team, the strength and weaknesses identified from the survey is listed below.

**Average quantitative assessment of the courses being taught to BS (CS) 4<sup>th</sup> semester**  
**A: Strongly Agree B: Agree C: Uncertain D: Disagree E: Strongly Disagree**

<b>Course:</b>					
The Subject matter presented in the course has increased your knowledge of the subject	58.76%	30.41%	2.06 %	6.70 %	2.06 %
The syllabus clearly states course objectives requirements, procedures and grading criteria	44.85%	37.63%	5.15 %	7.73 %	4.64 %
The course integrates theoretical course concepts with real-world applications	51.03%	32.99%	5.15 %	6.19 %	4.64 %
The assignments and exams covered the materials presented in the course	0.00%	2.06%	12.37 %	46.9 1%	38.6 6%
The course material is modern and updated	47.42%	42.78%	6.70 %	2.06 %	1.03 %

**Program strengths, weaknesses and future plans of the program BS(CS)**

<b>Program</b>	<b>Strengths</b>	<b>Weaknesses</b>	<b>Future development</b>	<b>Action taken for improvement</b>
<b>BS(CS)</b>	<ol style="list-style-type: none"> <li>The subject matter presented in this program has increased the knowledge of the students.</li> <li>The course contents provided in this program has integrated theoretical concepts with real world applications.</li> <li>Program smoothness</li> </ol>	<ol style="list-style-type: none"> <li>There is lack of tutorials and seminars</li> <li>Lack of Internet facility</li> <li>Program objectives achievements needs more attention</li> </ol>	<ol style="list-style-type: none"> <li>Enhancement of current knowledge.</li> <li>Solutions for current problems and planning for future.</li> <li>Use of state of the art technologies.</li> </ol>	<ol style="list-style-type: none"> <li>Tutorials are being Provided</li> <li>75% work has been done for internet deployment</li> </ol>



**Standard 1-4: The department must assess its overall performance periodically using quantifiable measures.**

Present students' enrolment (BS Computer Science)

Year	Enrollment	Student/ Faculty Ration
2009	22	7:1
2010	19	14:1
2011	19	15:1
2012	30	18:1

	Journal publication (HEC recognized only)	Ongoing projects	Faculty awarded excellence in research award	Conference publications
Total No	1	Nil	Nil	04

### Journal/conference papers

[Muhammad, S.](#) [Maqbool, O.](#) ; [Abbasi, A.Q.](#) "Evaluating relationship categories for clustering object-oriented software systems ", *Software, IET* 2012, Volume: **6** , **Issue: 3** , Page(s): **260 - 274**

[Muhammad, S.](#) [Maqbool, O.](#) ; [Abbasi, A.Q.](#) "Role of relationships during clustering of object-oriented software systems" *6th International Conference on Emerging Technologies (ICET)*, 2010, **Page(s):** 270 - 275 .

[Saeed, Z.](#) [Sadaf, A.](#) [Muhammad, S.](#) "Activity-based correlation of personal documents and their visualization using association rule mining", *7th International Conference on Emerging Technologies (ICET)*, 2011 , **Page(s):** 1 - 7

[Naseem, R.](#) [Maqbool, O.](#) ; [Muhammad, S.](#) "An Improved Similarity Measure for Binary Features in Software Clustering", *Second International Conference on Computational Intelligence, Modelling and Simulation (CIMSIM)*, 2010 , **Page(s):** 111 - 116

[Naseem, R.](#) [Maqbool, O.](#) ; [Muhammad, S.](#) "Improved Similarity Measures for Software Clustering" , *15th European Conference on Software Maintenance and Reengineering (CSMR)* , 2011, **Page(s):** 45 - 54

**CRITERION 2**  
**CURRICULEM DESIGN & ORGANIZATION**

A curriculum is designed and organized to achieve the program’s objectives and outcomes. Curriculum standards are specified in terms of credit hours of study. A semester credit hour equals one class hour or two to three lab hours per week. The semester is approximately fifteen weeks. Curriculum design and organization information provided below for **BS (CS)** program is attached with this document:

**Standard 2-1: The curriculum must be consistent and supports the program’s documented objectives**

**Title of Degree Program: BS Computer Science**

The following table shows the curriculum organization for the entire **BS (CS)** Program.

<b>First Year 1<sup>st</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CMSA1	Calculus and Analytical Geometry(Computing Supporting Course)	3
CMGE1	English I (Functional English) (General Education)	3
CMCC1	Introduction to Computing (Computing Core Course)	4
CMGE1	Islamiat and pakistan studies (General Education)	3
CMCC1	Programming Fundamentals (Computing Core Course)	4
	<b>Total Term Credit Hours</b>	<b>17</b>
<b>First Year 2<sup>nd</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CMCC1	Object oriented programming(Computing Core Course)	3
CMSA1	Basic Electronics (Computing Supporting Course)	3
CMGE1 23	English I I(Technical Writing and Presentation Skills) (General Education)	3
CSSA1 24	Discrete Mathematical Structures (Computer Science Supporting Course)	3
CMSA1	Linear Algebra (Computing Supporting Course)	3
CMSA1	Statistics & Probability(Computing Supporting Course)	3
	<b>Total Term Credit Hours</b>	<b>18</b>
<b>Second Year 3<sup>rd</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CMGE2	English III (Communication Skills) (General Education)	3
CMCC2	Digital Logic Design (Computing Core Course)	3
CMCC2	Data Structures and Algorithms(Computing Core Course)	3
CSSA2	Multivariate Calculus (Computer Science Supporting Course)	3
CSCC2	Computer Architecture (Computer Science Core Course)	3
CMCC2	Computer Communications and Networks(Computing Core Course)	3
	<b>Total Term Credit Hours</b>	<b>18</b>
<b>Second Year 4<sup>th</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CMCC2	Database Systems(Computing Core Course)	4
UNEC2	Java Programming (University Elective Course)	3
CSSA2	Differential Equations (Comp Science Supporting Course)	3

CMCC2	Operating Systems(Computing Core Course)	4
UNEC2	Web Programming (University Elective Course)	3
	<b>Total Term Credit Hours</b>	<b>17</b>
<b>Third Year 5<sup>th</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CMCC3	Introduction to Software Engineering (Computing Core Course)	3
CSCC3 52	Theory of Automata and formal languages(Computer Science Core Course)	3
UNEC3	Networking Strategies (University Elective Course)	3
CSEC3	Web engineering (Computer Science Elective Course)	3
CSCC3 56	Computer Organization and Assembly Language(Computer Science Core Course)	3
	<b>Total Term Credit Hours</b>	<b>15</b>
<b>Third Year 6<sup>th</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CSEC3	Digital Signal Processing (Computer Science Elective Course)	3
CSEC3	Data and Network Security(Computer Science Elective Course)	3
CSEC3	Computer Graphics(Computer Science Elective Course)	3
CSEC3	Distributed Database (Computer Science Elective Course)	3
UNEC3	Data Mining (University Elective Course)	3
CSEC3	Advance Software Engineering(Computer Science Elective Course)	3
	<b>Total Term Credit Hours</b>	<b>18</b>
<b>Fourth Year 7<sup>th</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CSEC4	Wirless Networking(Computer Science Elective Course)	3
CMCC4	Human Computer Interaction(Computing Core Course)	3
CSCC4	Design and Analysis of Algorithm(Computer Science Core Course)	3
CSSA4	Numerical Computing (Computer Science Supporting Course)	3
CSCC4	Artificial Intelligence(Computer Science Core Course)	3
CSEC4	Software Project Management (Computer Science Elective Course)	3
	<b>Total Term Credit Hours</b>	<b>15</b>
<b>Fourth Year 8<sup>th</sup> Semester</b>		
<b>Course #</b>	<b>Title</b>	<b>Credit Hrs.</b>
CMGE4	Professional Practices(General Education)	3
CSCC4	Compiler Construction (Computer Science Core Course)	3
CMCC4	Senior Design Project / Final Project (Computing Core Course)	6
	<b>Total Term Credit Hours</b>	<b>12</b>

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

**Courses vs. Program Outcomes**

Courses	Objectives			
	1	2	3	4
	Strongly	Moderately	Weakly	Uncertain
<b>Math and Basic sciences</b>	X			
<b>Core courses</b>	X			
<b>Humanities and Social</b>		X		
<b>Technical Eletive</b>		X		

**Standard 2-2: Theoretical background, problems analysis and solution design must be stressed within the program's core material.**

Theoretical background, problems analysis and solution designs is stressed in program's core material.

**Courses vs. Elements**

Elements	Courses
Theoretical background	CMCC116, CMCC121, CMCC232, CSCC235, CMCC236, CMCC241, CMCC244, CMCC351, CSEC361, CSCC475
Problem analysis	CMCC241, CMCC244, CSCC352, CSCC356, CSEC366, CSEC364, CSCC473, CSEC476
Solution Design	CMCC483, CSCC482, CMCC472, CMGE481, UNEC246, CSEC355, UNEC242, CMCC116, CMCC121

**Standard2-3: The curriculum must satisfy the mathematics and basic sciences requirements for the program as specified by the respective accreditation body**

The curriculum satisfies the core requirements for the program as specified by the accreditation body.

**Minimum requirements of credit hours for BS (CS) program**

Sr.#	Category	Credit Hours	Credit Hours
1	Computing Courses		64
	Core Courses	34	
	Supporting Areas	12	
	General Education	18	
2	Computer Science Courses		51
	Core Courses	21	
	Electives Courses	21	
	Supporting Courses	9	
3	University Electives		18
	<b>Total Credit Hours</b>		<b>133</b>

**Standard 2-4: The curriculum must satisfy the major requirements for the program as specified by the respective accreditation body**

The curriculum satisfies the core requirements for the program as specified by HEC same as above. The curriculum in the program is fully satisfied the major requirements of the program.

**Standard 2-5: The curriculum must satisfy humanities, social sciences, arts, ethical, professional and other discipline requirements for the program as specified by the respective accreditation body**

The curriculum satisfies general education, arts, and professional and other discipline requirements for the program.

BS(CS)	Mathematics and Basic Sciences		Computer Science Subject				Humanities and Social Sciences	
	Required	Present	Core		Elective		Required	Present
			Required	Present	Required	Present		
	7	7	7	7	8	8	4	4

**Standard 2-6: Information technology component of the curriculum must be Integrated throughout the program**

IT component of the curriculum must be integrated throughout the program.

**IT contents of the Program**

Course	IT Contents
CMCC114, CMCC351, CMCC236, UNEC353, CSEC362, CSEC471, UNEC246, CSEC355, CMCC244.	Introduction to Computing, Introduction to Software Development, Computer Communication & Networks, Network Strategies, Data and Network Security, Wireless Network, Web Programming, Web-Engineering, Operating Systems

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

Oral and written communication has been given importance in the program. Students are encourage to speak in English during class and take part in curriculum and co-curriculum. Students' skills in oral and written communication are satisfactory .

**Oral and Written communication Skills**

**Courses for oral and written skills**

CMGE113, CMGE123, CMGE231

**CRITERION 3**  
**LABORATERIES AND COMPUTING FACILITIES**



**Standard- 3-1: (Lab manuals/documentation/instruction for experiments must be available and readily accessible to faculty and students.**

Laboratory manuals/instructions for experiments are available and accessible to faculty and students. In each program faculty prepare lab manuals for required programming language practices that make available to each student.

Adequate laborites and computing facilities are available and accessible to students to support teaching.

Laboratory/computing facilities shown in the following table, provided within the department:

- General Purpose Lab

**Lab information**

<b>Lab title</b>	<b>General Purpose Lab / Computer Science Lab</b>
<b>Location and area</b>	<b>High Altitude Research Block Area:28× 28</b>
<b>Objectives</b>	To supplement students with professional practices along with theory .To enable students to apply their skills in various fields is to various problems and situation.
<b>Adequacy of Instructions</b>	Students are adequately instructed about safety measures so that apparatus is kept away from misuse and damage students may not become victims of various ergonomics.
<b>Courses Taught</b>	Various courses where practical's are involved or where multimedia is must to taught.
<b>Available software</b>	Software availability is a problem. We have some pirated software's. We have deficiency of original s software like as  MS Window 7, Linux, MS Office, Front Page, Dream Weaver, Visual studio, MS Visio, Antivirus, Photo shop, Mat lab, Netbeens/Eclipse Wire shark, C++
<b>Major Equipment</b>	Computers (Core to due), Multimedia. Our lab is lacking basic facilities such as Carpet Curtains, split AC. We need fixed multimedia too
<b>Safety regulations</b>	Every student is aware of various ergonomic so that no injury is caused during practical's. But there is no safety apparatus like Fire Extinguisher.

**Standard 3-2: There must be adequate support personal for instruction and maintaining the computing laboratories**

There is adequate support personal for instructions and maintaining the laboratories. Support personal includes lab Supervisor and Lab Assistant. The following Table shows the Support personnel information for GPL lab within the department.

**Support personnel information**

<b>Lab title</b>	General Purpose Lab
<b>Support personnel</b>	Mr. Jalal Ud Din and Mr. Wazir Zada
<b>Level of support</b>	Good
<b>Nature and extent of instructional support</b>	Practical support of insignificant nature to large extent

**Standard 3-3: The university computing infrastructure and facilities must be adequate to support programs objectives.**

The university computing infrastructure and facilities are adequate to some extent to support program's objectives. Computing infrastructure and facilities are provided to offered programs. The following Table shows the total number of computer infrastructure and facilities provided within the department.

**Computer Infrastructure & Facilities:**

<b>Apparatus</b>	<b>Quantity</b>
Total number of computers	30
Total number of printers	0
Total number of Multimedia	1
Electricity Generator	2
<b>Total number of computer infrastructure and facilities</b>	<b>33</b>

**CRITERION 4**  
**STUDENTS SUPPORT & ADVISING**

The students are provided full support to complete the program in timely manner. The faculty members are available during office hours and students are encouraged to consult them in case they have any problem. Students are fully supported and advised in academic and extra-curricular activities by the faculty members of the department.

**Standard 4.1: Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.**

The course is offered regularly as per schedule. The degree consists of eight semester's two terms per year. The department offers core courses in first six semesters of BS Program; while elective courses are offered in the last two semesters. Minimum 15 students in a batch are required to offer the course. This condition was relaxed in just 3 years of the university. Maximum 30 students are taken in a class.

**Standard 4-2: Courses in the major areas of study must be structured to ensure effective interaction between student, faculty and teacher assistants.**

Every course offered in the program carry assignments, class presentations and practical work. Students have close interaction with their teachers for the guidance related to prepare their assignments and presentations. Each instructor adopts his way to interact with his students either in the class or during the office hours. However no proper procedure is adopted for student teacher interaction. Improvement needs in this area to fulfill the requirements.

**Standard 4-3 Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and careers choices.**

An orientation class is conducted in the start of every semester. In the orientation class, concerned faculty members provide a document containing program mission, objectives, outcomes, curriculum design & organization, assessment-methodology and attendance criteria.

Similarly, the contents of the document having program mission, objectives, outcomes are available to all students of the concerned course in shape of module description. The same document is also shared with the concerned Chairman/ HoD, Office of the QEC and Director Academics. Professional counseling is usually carried out by Student Career Counseling Committee constituted for the purpose. The students can also consult with the chairman of the department or with the office of the registrar. A faculty member is assigned responsibility to discuss and coordinate with students in taking the right decision about their career.

**CRITERION 5**  
**PROCESS CONTROL**

The execution of the major functions, such as student admission and registration, faculty recruitment, teaching, and graduation are documented and conducted in a well-organized manner. These processes are controlled, periodically reviewed and evaluated continuously.

**Standard 5-1: The process by which students are admitted to the Program must be based on quantitative and qualitative criteria and clearly documented. The process must be periodically evaluated to ensure that it is meeting its objectives.**

The admission criterion is set by the university and it is revised periodically. However, the admission of the students is the responsibility of the Director Academics office and the department is not directly involved in this process. The admission office gives admissions according to the criteria set by the university.

**Admission Procedure:**

- The admission notice for BS (Hons) Program (4 years) is advertised in the national and local newspapers soon after the result declaration of FA/FSc of all Boards of Intermediate & Secondary Education of Khyber Pukhtunkhwa. All the eligible candidates fulfilling the requirement can apply for the courses offered by the university.
- The prospective applicants are asked to submit their admission forms, complete in all respects, within the prescribed period of time.
- After a thorough scrutiny and sorting, the names of eligible candidates are notified.
- A candidate may apply for three disciplines/subjects on a single form, but he/she must prioritize his/her options in the admission form.
- Once submitted, no changes/modifications are acceptable in the admission form.
- A candidate gets to lose his/her right for admission, if he/she provides false information in the admission form. Moreover, if the documents attached were found fake they would be considered guilty of gross misconduct and such act shall be highly condemned.
- The applicant having 3<sup>rd</sup> division or having obtained marks less than 45% are not eligible to apply.

**Criteria for Admission:**

Students with FSc pre-engineering/FCS or Equivalent with at least 45% marks are eligible to apply. The selected candidates for admission must present their original documents before the committee on the announced date.

**Documents to be submitted with admission form:**

The following documents must be submitted with the completed application form:

1. Three recent color passport size photographs, duly attested
2. Attested photocopies of Detailed Marks Certificates (DMCs)
3. Attested photocopies of provisional /original certificates
4. Attested photocopy of character certificate
5. Attested photocopy of CNIC of the Applicant/Father/Guardian
6. Migration certificate, either board to university or university to university (for admitted candidates only)
7. Original undertaking on judicial stamp paper of RS. 20/- each, duly attested by political agent/DCO/ First class magistrate as PS specimen provided in the prospectus (for admitted candidates only)
8. Candidates applying against the reserved seats of disabled or Afghan students must also attach the relevant documents of eligibility with the form

Distribution of seats in each department is given as under:

Open merit	26
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**Reserved Seats:**

Female	2
Afghan	01
Disabled/Handicapped	01
<b>Total:</b>	<b>30</b>

**Displaying of merit lists:**

After the closing date of admission forms submission, the provisional merit lists are prepared on the basis of the following points:

- Percentage of marks obtained in FA/FSc
- In case of a tie in any merit position, SSC marks percentage is considered. In case of further tie, the age of the applicants is the determining criteria and the older candidate is to get preference.
- Separate merit list are prepared for the reserved seats of female, Afghan students and disabled following the above criteria.

- All the merit lists for admission are displayed on the main notice board of the university campus and on the university website <http://www.sbbu.edu.pk>

**Interview of specified seats:**

- Interview for the specified seats of Afghan students and disabled are held on the dates specified by the office of the Director Academics.
- All the applicants will ensure their presence and signature in the attendance sheet on the day of test/interview, even if they are on waiting list.
- The university fee is to be deposited in HBL Sheringal Branch, adjacent to university campus. After depositing the prescribed fee, the applicant must bring the original bank receipt to the account section of the university.
- In case a student wants to shift from one discipline to another within a certain time period, the fee and other charges shall be adjusted accordingly.
- Any reserved seat remaining unfilled, at the prescribed time, shall be filled through open merit.

**Standard 5-2: The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented.**

Each department shall send details of the admitted students to the controller of examinations on the prescribed proforma for registration within one month of the finalization of 1<sup>st</sup> term/part-1/previous admissions. The office of the controller of examinations shall maintain record of all the registered students in manner which shall contain the Name, Father's Name, Date of Birth, Permanent address, CNIC No. of the candidate, DMC of SSC and intermediate Examination, details of any other examination and result of every University Examination.

**Academic Progress of Students:**

In semester system, monitoring of student progress is evaluated by tests, surprise quizzes, assignments, class presentation, projects and final exam at the end of the semester.

**Internal Evaluation:**

Attendance + Class participation	=5 %
Class Presentation	=10 %
Home Assignment	=10 %
Test and Quizzes	=10 %
Mid Term	= 25 %
Final Term	= 40 %



In addition to the above criteria, the experts of the subject can add any addition modes of evaluation as required by the nature of the subject. Similarly, if required, a teacher can have 3 to 5 tests and 1 -3 Mid Term tests.

**Standard 5-3: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation**

Recruitment of the faculty members is done on open merit by inviting the applications through newspapers. Written screening test is conducted for short listing. The candidates are required to appear before the selection board for interview. The names of selected candidates are recommended to syndicate for approval. After the approval, the registrar issues the offer letters for the appointment. Faculty members are made in accordance to the policy approved by HEC.

**Faculty’s Recruitment, Training, and Evaluation**

Faculty	Policy	Process
Recruitment	As per HEC guidelines	Through selection board (for permanent seats) and approval by the University Syndicate. Through HOD & VC (on contract basis)
Evaluation	As per HEC guidelines (Periodically)	Evaluation by students through Quality Enhancement Cell (QEC) and Self-assessment by the faculty. (At the end of each semester)
Promotion	As HEC criteria for faculty promotion and service statute of SBB University.	Through selection board and approval by the University Syndicate

The performance of the faculty members is monitored regularly and continuously by the Chairman/HoD of the department, and it is evaluated annually through ACRs. (Annual Confidential Report)

There was no systematic process before to evaluate the faculty members, now after establishment of QEC each faculty member is evaluated by the students via “Teacher Evaluation Questionnaire”. at the end of each semester.

**Standard 5-4: The process and procedures used to ensure that teaching and delivery of course material to the students emphasize active learning and that course learning outcome is met. The process must be periodically evaluated to ensure that it is meeting the objectives.**

Process to ensure teaching and delivery of course material:

- Time table is strictly followed by all faculty members. The Chairperson of the department frequently gets feedback from the students during the semester.

- Students are show their test and papers in the show off session after every test and quiz, this process in made sure by the HoDs. Students can see their papers marked by the teacher and view it.
- All the relevant materials (Tests, Assignments and Quizzes) of evaluation are submitted to the office of the HoD. It purpose to ensure that the grading is transparent
- Award list of all sessional and final term papers is submitted to the controller of examination and copies are left in the department.

In order to ensure that the teaching is effective a quarterly survey is conducted by the university QEC and the findings are communicated to the concerned faculty members. After completion of Survey Assessment Team meeting is called to assess the process and make implementation plan for the said department.

**Standard 5-5: The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.**

Currently there is no proper procedure to assure that whether the graduates meet the program requirements or not. This area needs concentration to develop this procedure. Plan required for this area. As no graduates are yet produced. So no proper procedures to assure that the graduates meet the program requirements or not. This area needs concentration to develop this procedure. Further planning is required for this area.

**CRITERION 6**  
**FACULTY**

Faculty members of the Shaheed BB University are active in teaching and research activities and have the necessary technical depth to support the program. Teachers attempt to cover the curriculum adequately and in case of need hold extra classes.

**Standard 6-1:** There must be enough full time faculty who are committed to the program to provide adequate coverage of the program areas / courses with continuity and stability. The interest of all faculty members must be sufficient to teach all courses, plan, modify and update courses. The majority must hold a PhD degree in the discipline

The interest and qualifications of faculty members are sufficient to plan, teach, modify, and update all offered courses and curriculum. Following are the brief details of the departments' faculty members.

**Pen Picture of Faculty Members:**

S.No	Name	Designation	Email	Qualification
1	Siraj Muhammad	Assistant Professor	msiraj83@gmail.com	M.Phil. (CS)
2	Sami Ullah	Lecturer	sami@sbbu.edu.pk	MS(CS)
3	Shahzad Khan	Lecturer	shahzadbehram@gmail.com	MS(CS)
4	Mehmood Khan	Lecturer		MS(CS)
5	Irfan Ullah	Lecturer	irfan@sbbu.edu.pk	BS(CS)

**Standard 6-2:** All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

Faculty members of Shaheed BB University are considered updated in the discipline based on the following criteria:

- All teachers meet the HEC criteria for appointment in their respective cadre.
- Teachers generally participate in seminars, conferences at National /International levels.
- Teachers take interest in teaching and involve themselves in research activities
- A number of teacher training and refresher courses are conducted by QEC, and other academic departments in the university.

### **Faculty development**

<b>Standards</b>	<b>Y/N</b>
Faculty resume has been prepared in line with HEC	Yes
Full time faculty have sufficient time for scholarly activities and professional development	Yes
Any faculty development program is conducted	Yes
Faculty programs are evaluated	Yes
Evaluation results of faculty are used for improvements	Yes

**Standard 6-3: All faculty members should be motivated and have job satisfaction to excel in their profession**

Every year university awards (Best University Teacher Award) to faculty members for their outstanding performances. Outstanding Teachers are selected based on Students Teacher Evaluation Questioner, Peer Evaluation and HoD Evaluation. For job satisfaction the university ensures fair, timely selection, appointment/promotion as per HEC criteria.

**CRITERION 7**  
**INSTITUTIONAL FACILITIES**

Institutional facilities, including library, class rooms and offices need improvement to support the objectives of the overall programs of the University. Class rooms and offices must be adequate to enable faculty to carry out their responsibilities.

**Standard 7.1: The institution must have the infrastructure to support new trends such as e-learning.**

Electronic library books and journals are not available for learning purpose.

- Insufficient facilities regarding the infrastructure to support new trends in learning.
- Insufficient library's technical collection of books.
- Recommended books, relevant journals of the programs are not available to the students.
- However, this aspect needs to be strengthened for overall university departments.

**Following facilities are available at the department at the University Campus:**

**Internet Facility**

Limited internet facility is available for students.

**Hostel Facility**

Limited hostel facilities for boys are available.

**Canteen**

Separate girl's canteen is present for girl students within the campus.

**Medical Facility**

Though currently there is no medical practitioner in the BHU. It is run by a pharmacist who is assisted by a dispenser.

**Sports Facility**

Directorate of sports is present in the campus

**Faculty Offices**

Offices with in adequate facilities are available for the faculty.

**Standard 7.2: The library must possess an up-to-date technical collection relevant to the Program and must be adequately staffed with professional personnel.**

The library space and books are not sufficient for university and is also not updated regularly according to the academic and research needs of the university staff. The university Central Library has very limited number of books and journals. It does not meet the standards of a university library. Departments itself does not have any library. The Library is not registered to any on-line journal or database cataloging and abstracting engines.

**Standard 7.3: Class room must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.**

Majority of the class rooms are available without multimedia. Common rooms (Neither for male nor for female students) are also missing. The department lacks individual faculty offices mostly shared offices are available and class room facilities are also not sufficient.



**CRITERION 8**  
**INSTITUTIONAL SUPPORT**

The university administration is trying to provide all the possible facilities to the departments and has been struggling hard for the up gradation of departments and establishing new faculties and institutes.

**Standard 8.1: There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teachers and scholars.**

In order to groom the faculty, university usually offers various trainings, workshops and seminars for faculty. The University is also trying to attract highly qualified faculty. All the financial matters of the overall department are managed by University finance Directorate and Registrar office with no involvement of the department. Last year, the university arranged 10 trainings for in service teachers both in main and sub campus at Chitral. These training were of various length duration ranging from 3 days to one month period.

**Faculty Pay** is as per the institution & universities in the public sectors.

**Standard 8.2: There must be an adequate number of high quality graduate students, research assistants and Ph.D. students.**

The university is newly established so there is no research assistant. There are currently only five PhDs in the university. Moreover they have no research allowance and get only 5000/- PhD allowance which is not equal to other universities. This area highly needs the concentration or focus of the authority.

**Standard 8.3: Financial resources must be provided to acquire and maintain Library holdings, laboratories and computing facilities.**

All the financial matters of the overall department are managed by the university Finance Directorate and Registrar office with no involvement of the department.