Executive Summary

Self-Assessment Report (SAR) of Program BS (Software Engineering)

Directorate of Quality Enhancement (DQE)

Virtual University of Pakistan

The Virtual University of Pakistan established in 2002 intending to provide extremely affordable world-class education to aspiring students all over the country regardless of their physical location by alleviating the lack of capacity in the existing universities while simultaneously tackling the acute shortage of qualified professors in the country using free-to-air satellite television broadcasts and the Internet. To pursue this aim the Department of Computer Sciences is designated to initiate and implement the Self-Assessment process designed by the Quality Assurance Agency (QAA) of HEC. The current document summarizes the findings of the self-assessment process of the BS Soft Engineering program.

The department of Computer Sciences is committed to producing graduates who can develop computer applications/processes to enhance the efficiency & effectiveness of organizations to lead in the global marketplace. The department follows its vision in all of its courses and areas of specialization offered at both Masters and Bachelors levels. The department feels satisfied upon completion of the following list of tasks:

1. Development of *Self-Assessment Report (SAR)* by Program Team for BS (SE) program
2. Conduct of critical review and submission of *Assessment Report (AR)* by Assessment Team for BS (SE) program
3. Development of *Rectification Plan* by Head of Department

The tasks were completed according to the set methodology through Program and Assessment Teams nominated by the Rector on the recommendation of the Department.

Methodology

The following methodology is adopted to complete the whole SAR cycle:

1. A Program Team (PT) was nominated for the program. Initial orientation and training sessions for all members were arranged. The composition of PT is given in Table 1:

Table 1: Program Team

Sr.#	Name	Designation
1.	Ms. Noureen Hameed	Lecturer (Computer Science)
2.	Mr. Adnan Asif	Lecturer (Computer Science)

2. All the relevant material such as the SAR manual, survey forms, etc. was provided to PT.
3. Continuous support, guidance, and feedback were provided to PT members to prepare the SAR for the said program.

4. After completion and submission of the final SAR by PT, an Assessment Team (AT) was formed by the Rector on the recommendation of the Department.

Table 2: Assessment Team

Name	Designation
Mr. Yasir Mehmood	Associate Professor, (Computer Science)

5. The SAR developed by PT was forwarded to AT for critical review.
6. After completion of the critical review and assessment of the SAR, AT members visited the department and had a meeting with PT.
7. After the visit, AT submitted a report and feedback form (Rubric Form) to DQE.
8. DQE forwarded the observations & findings of AT report to the Head of Department for developing a rectification plan.
9. DQE will now monitor the implementation of the Rectification Plan.

Parameters for the SAR:

The SAR is prepared on the following eight (8) criteria prescribed by the HEC:

- Criterion 1: Program Mission, Objectives, and Outcomes
- Criterion 2: Curriculum Design and Organization
- Criterion 3: Laboratory and Computing Facility
- Criterion 4: Student Support and Advising
- Criterion 5: Process Control
- Criterion 6: Faculty
- Criterion 7: Institutional Facilities
- Criterion 8: Institutional Support

Key Findings of SAR:

A summary of the key findings from SAR is given below:

Academic Observations:

1. The Mission statement of the University is very lengthy and presented in a list format. This type of writing style is against the conventional norms.
2. The mission statement of the department is provided by the PT but no documented evidence for the approval of the statement is provided. In addition to this, the display of the mission on VU's main website for public awareness was not evident.
3. The mapping of objectives vs outcomes is not logical. A single outcome is mapped with too many objectives which are not possible. The mechanism behind this mapping is also not defined.

4. Employer's survey is a very important tool to assess the quality of the program graduates, but it is missing.

5. Some of the courses are very old which is alarming considering the rate at which technology is evolving.

6. The learning objectives and outcomes of most of the courses are abstract and not measurable.

7. The study centers are sufficient enough to meet the academic needs of the students, but no evidence is available regarding the audit of physical facilities. Are these facilities being effective and efficient to meet students' needs?

8. Adobe Connect Sessions are used as a means of student-faculty interaction; however, it is not evident that to what extent, these sessions are effective.

9. For the career counseling of students, seminars and workshops should be organized at least once a semester, and experts from industries and organizations should be invited.

10. University has the infrastructure to counsel and advise students but how it is measured, is not specified yet. The effectiveness and efficiency of such a system need documented evidence in the form of a feedback survey.

11. The processes of the university are very strong and centralized. The important aspect is the review and evaluation of these processes. No evidence is available to learn when these processes are being evaluated.

12. Lack of library resources is a major issue. University should ensure that library resources are available for students. If a physical library in VU campuses is not a feasible option, then an e-library portal must be added in LMS to facilitate the students and faculty. E-library should contain all the required resources especially e-books of BS-SE. It is reported in the document that an e-library or digital library is used but no supporting documents like e-catalog, login logs, a total list of subscribed Journals, e-books, etc. are available.

13. The fact that facilities in the classrooms at campuses are available can be verified either through physical visits or through annual audit reports of the campuses.

14. The record of financial assistance or scholarships provided to students is unavailable.

Administrative Observations:

- There is a shortage of faculty offices. However, the existing offices for faculty should be improved to maximize their productivity. There should be separate cabins for each faculty member where faculty can fulfill their professional responsibilities without any disturbance.

- Shortage of faculty members having SE specialization is observed.

Conclusion and Recommendations:

While analyzing Criteria Referenced Self-Assessment, it has been observed that the performance of the department is satisfactory however, many gray areas have been identified/reported by AT due to which the department is perceived as underperformed. This perception is reflected in terms of a moderate overall assessment score (75/100) reported by AT. This score calls for the immediate implementation of a rectification plan.
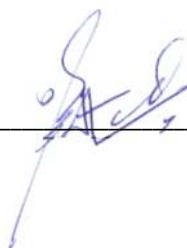
The Need Improvement areas identified during the self-assessment process have been reported to the Head of the respective Department and specific rectifications have also been requested. DQE will follow up on the implementation plan as per the specific time frame.

Prepared by:

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Manager, QA

Director DQE: _____

The Rector: _____