

**Executive Summary**  
**Self-Assessment Report (SAR) of Program MS (Computer Science)**  
**Directorate of Quality Enhancement (DQE)**  
Virtual University of Pakistan

The Virtual University of Pakistan established in 2002 with aim 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 Self-Assessment process designed by Quality Assurance Agency (QAA) of HEC. The department is committed to produce graduates who can develop computer applications/processes to enhance efficiency & effectiveness of organizations to lead in global market place. Department follows its vision in all of its courses and specializations that are being offered at both Masters' and Bachelors' levels. The department feels contentment on the completion of following list of tasks.

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

The tasks were completed according to set methodology through Program Teams and Assessment Teams nominated by DQE.

### **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 by DQE. The formation of PT is given in Table 1:

**Table 1: Program Team**

<b>Sr.#</b>	<b>Name</b>	<b>Designation</b>
1.	Abdul Basit Dogar	Lecturer (Computer Science)
2.	Syed Shah Muhammad	Lecturer (Computer Science)
3.	Muhammad Anwar	Instructor (Computer Science)

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

- After completion and submission of the final SAR from PT, an Assessment Team (AT) was formulated by Director DQE with the consent of worthy Rector and a Subject Specialist & Expert from outside was also included. The formation of PT is given in Table 2:

**Table 2: Assessment Team**

Sr.#	Name	Designation
1.	Dr. Asad Raza Kazmi	Assistant Professor (Department of Computer Sciences, GCU, Lahore)
2.	Mr Omer Farooq	Assistant Professor (Computer Science)
3.	Mr. Muhammad Farhan	Instructor (Computer Science)

- The SAR developed by PT was forwarded to AT for the purpose of critical review.
- After completion of critical review and assessment of the SAR, AT team members were made a visit in the department and hold a meeting with PT.
- After the visit, AT submitted a report and feedback form (Rubric Form) to DQE.
- DQE forwarded the observations & findings of AT report to the Head of Department for developing a rectification plan.
- DQE would now monitor implementation of 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
- Criterion 2: Curriculum Design and Organization Criterion
- Criterion 3: Laboratory and Computing Facility Criterion
- Criterion 4: Student Support and Advising Criterion
- Criterion 5: Process Control Criterion
- Criterion 6: Faculty Criterion
- Criterion 7: Institutional Facilities Criterion
- Criterion 8: Institutional Support

#### **Key Findings of the SAR:**

Following is the summary of the key SAR findings:

#### **Academic Observations:**

- More specializations should be offered in MS (CS) program.
- There are many faculty members (14 to the precise) in CS department who are currently enrolled in PhD. VU must take this fact as opportunity and allow them to supervise MS

thesis for at least one student. This supervision must be backed up with some financial support.

3. In order to attract senior faculty members on permanent basis and also to retain current faculty there should be an option of time flexibility.
4. Department has the deficiency of updated books and physical library relevant to their programs. E-book, E-Journal access/facility should be provided to the faculty members as current access is very limited.

**Administrative Observations:**

- There is an intensive demand for semester break, summer/winter vacations.
- There is shortage of faculty offices. No support is available to faculty members to attend scientific conferences and meetings.
- Shortage of faculty members which results in over burdening of existing faculty members.
- Student-Teacher ratio is inadequate and is an impediment in the achievement of program outcomes, therefore it should be addressed.

**Conclusion and Recommendations:**

While analyzing Criteria Referenced Self-Assessment, it has been observed that Department's performance is satisfactory but still there many gray areas due to which the department is perceived as underperformed. This perception is reflected in terms of moderate overall assessment score (55/100) reported by AT. This average score demands a rectification plan should be implemented immediately. The Criterion contributing most for this low score is clarity in faculty and institutional support. AT is also reported the shortage of faculty members in the department. The other most important aspects emphasized by AT are lack of library, privacy, inappropriate office environment and nonexistence of faculty offices and these aspects are serious impediments that need to be rectified.

The deficient areas identified during SAR process have been reported to the HoD of respective department and rectification for each has also been suggested. DQE will follow up the implementation plan as per time frame given by DQE.

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Rizwan Saleem Sandhu  
Deputy Director, DQE

Director QEC: \_\_\_\_\_

Worthy Rector: \_\_\_\_\_