

Executive Summary

Program MS (Computer Science)

Cycle III (2023-24)

The Department of Computer Sciences has been chosen to commence and implement the Self-Assessment procedure proposed by HEC's Quality Assurance Agency (QAA) to pursue the VU mission of quality education. The current document summarizes the findings of the self-assessment process executed for the BS Computer Science 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 **Master's** and **Bachelor's** levels. The department feels satisfied upon completion of the following list of tasks:

1. **Development of Self-Assessment Report (SAR)** by the Program Team (PT) for the MS Computer Science.
2. Conduct of critical review and submission of the **Assessment Report (AR)** by the Assessment Team (AT) for the MS Computer Science.
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 department adopted the identical methodology defined by the QAA. The methodology includes the nomination and notification of PT and AT after approval of the competent authority. Initial orientation and training sessions for all members were arranged. All the relevant materials like the manual, survey forms, etc. were provided to PT and AT.

Program & Assessment Teams

Sr.#	Name	Type	Designation
1.	Dr. Nida Anwar	PT	Assistant Professor, (Computer Science)
2.	Dr. Hasnain Ahmad	AT	Assistant Professor, (Computer Science)

PT developed the SAR following the eight criteria available in QA Manual provided by QAA, HEC. Various recommended surveys (Graduating, Alumni, and Faculty satisfaction) were also conducted to collect diverse feedback. A meeting was scheduled for May 24, 2024, at the Lawrence Road office to critically evaluate the program by AT, with all DQE team members in attendance. After the meeting, AT submitted a report and feedback form (Rubric Form) to DQE.

Based on the findings of AT, the Head of the Computer Science Department was requested to develop a rectification plan. Continuous support, guidance, and feedback were provided to both PT and AT members to prepare the SAR and AT Reports for the said program. DQE will now monitor the implementation of the Rectification Plan.

Key Findings of the SAR:

Following is the summary of the key SAR findings:

Academic Observations:

1. There is no department-level committee or body that periodically evaluates the program and recommends improvements.
2. Alignment between program objectives and outcomes is essential and for this purpose, there is a need to make fine-tuning objectives and outcomes and also to make them measurable.
3. The mapping of learning objectives and outcomes is inconsistent.
4. The mapping of the programs' learning objectives (PLOs) and programs' educational outcomes (PEOs) needs revision on a priority basis
5. It is reported that an e-library or digital library is used but no supporting documents like e-catalog, login history, list of subscribed Journals, e-books, etc. were available.
6. The department has deficiency of updated books and a 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.
7. Lack of time for research activities is identified as a main weak area of the job description of faculty associated with the Virtual University of Pakistan.
8. There is a shortage of faculty offices. No support is available to faculty members to attend scientific conferences and meetings.
9. Shortage of faculty members which results in over burdening of existing faculty members.
10. Student-Teacher ratio is inadequate and impedes the achievement of program outcomes, therefore it should be addressed.
11. The AT highlighted reservations about formal career counseling prospects which were found insufficient. The AT proposed that the University must arrange seminars and invite experts from industries and organizations for live interaction.

Conclusion and Recommendations:

While analyzing Criteria Referenced Self-Assessment, it has been observed that the Department's performance is satisfactory but still there are many gray areas due to which the department is perceived as underperformed. This perception is reflected in terms of the moderate overall

assessment score (71.78/100) reported by AT. This average score demands a rectification plan should be implemented immediately.

The criteria rated relatively low by AT were Criterion # 7 (Institutional Facilities) and Criterion # 8 (Institutional Support). AT also reported the shortage of faculty members in the department. The digital library is the least effective and does not meet the scholarly requirements of students and faculty. The team also showed concern about the shortage of faculty members, publications output of faculty, and limited access to digital resources and physical libraries.

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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Director DQE: _____