## **Executive Summary**

# Program BS (Information Technology) Cycle III (2022-23)

The Department of Computer Sciences has been chosen to commence and implement the Self-Assessment procedure proposed by HEC's Quality Assurance Agency (QAA) in order to pursue the VU mission of quality education. The current document summarizes the findings of the self-assessment process executed for the BS Information Technology 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 BS (IT)
- **2.** Conduct of critical review and submission of the *Assessment Report (AR)* by the Assessment Team (AT) for the BS (IT) 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 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	Туре	Designation
1.	Mr. Sohail Aamir	PT	Tutor (Computer Science)
2.	Dr. Safi Ullah Nasir	AT	Assistant Professor, (Computer Science)

PT developed the SAR in accordance with the following eight (8) criteria provided by QAA.

- 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

Various recommended surveys (Graduating, Alumni, and Faculty satisfaction) were also conducted to collect diverse feedback. A meeting was arranged on May 24, 2023, at the Lawrence Road office for critical evaluation of the program by AT in which all DQE team members were also present. 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 SAR:**

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

#### **Academic Observations:**

- 1. The academic observations presented in Cycle II are still not rectified yet. The status of the previous implementation plan is not traceable from the SAR.
- 2. The departmental mission statement is not available on the main website of the University. In addition to this, no web page specific to the Computer Science department is available where the statement can be published.
- 3. No evidence of approval of the mission statement of the University as well as the department from the competent authorities is provided by the program team.
- 4. The mapping of objectives vs outcomes is inappropriate. An outcome is mapped with too many objectives. No mechanism is provided for how this mapping is done by the Program Team. The objectives and outcomes are not measurable as well.
- 5. More training or courses need to be included to enhance the written as well as Oral communication of the students.
- 6. The faculty workload is too high. There is also not enough transparency about workload distribution.
- 7. Faculty conducting the course is not involved in final grading on a curve. Courses have different difficulty levels, video lecture issues, QB difficulty, assignment difficulty, and student issues which are fully known only by the faculty conducting the course. However, the final grading does not involve the faculty conducting the course.

- 8. The mode of education of VU is online and keeping this mode in mind, VU has provided access to online books or journals to students through HEC digital library. The problem with this digital library is that the access to online books or journals is very little or minimum. This access does not meet the requirements of students who are doing projects or research. The login logs must be shared to learn the students' traffic in a digital library.
- 9. The employers' survey is missing and should be conducted, and its findings should be added in the next cycle of the report.

#### Administrative Observations:

- The non-existence of proper faculty offices & poor office environment is hitting unfavorably and dropping the motivation level of faculty.
- The campus environment is not conducive for online meetings as the campuses are too noisy. Noise-reduction headphones must be provided to all faculty members.

### **DQE Observations**

- 1. To represent the course type, VU internal terminology is used which is not common for all readers. Therefore, it suggested revising the categories similar to HEC nomenclature like Foundation, Compulsory instead of "Required" etc. In addition to this, publish updated information on the website.
- 2. VU-owned and private campuses have well-equipped latest computer labs. However, this claim must be rationalized through facts and figures provided in periodic campus audit reports. There must be periodic auditing for Labs / PVCs.
- 3. The document does not define the evaluation mechanism to evaluate any process. Who initiates the evaluation? How frequently are the processes evaluated? How are the outcomes of such evaluations used for decision-making? The answer to these questions is unavailable. Summarize all the processes being followed by the department in a tabular format along with the parameters mentioned above.
- 4. There is no mechanism available to evaluate the program's performance as a whole. The different interfaces like LMS or VIS are designed to evaluate different courses. A dashboard must be designed to review the program's performance after defining various KPIs at the program level.

#### **Conclusion and Recommendations:**

While analyzing Criteria Referenced Self-Assessment, it has been observed that Department's performance is **Good**, which is reflected in the overall assessment score (66/100) reported by AT. There are two Criterions due to which the department's performance to some extent needs improvement; the first is the *Institutional Facilities* and the second is *Institutional Support* to achieve the program's objectives. These Criteria are not as per the standards of HEC and these Criteria demand immediate implementation of a rectification plan. One of the most important aspects emphasized by AT is the fact that there is a lack of library, privacy, too much workload, non-participatory decision making, inappropriate office environment, and nonexistence of faculty offices are other serious impediments that need to be rectified.

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

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